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Le but de cette étude est d'explorer le mouvement d'éducation en plein air tel que perçu par des experts et des responsables du Québec, des autres provinces du Canada, des Etats-Unis et d'outre-mer. Il s'agit d'en tirer des conclusions et de faire des recommandations en vue de la mise en place d'un programme d'éducation en plein air à l'Université Laval.

L'étude repose sur la méthode Delphi. L'auteur a dressé, à partir d'une revue de la documentation et de suggestions de professeurs, une liste de 97 énoncés. Il envoya son premier questionnaire à un petit groupe d'experts du Québec, des autres provinces du Canada, des Etats-Unis et d'outre-mer, leur demandant d'évaluer les énoncés, de suggérer des modifications et d'exprimer leurs opinions. Suite à l'analyse des réponses, il expédia un deuxième questionnaire aux mêmes experts, leur demandant de reconsidérer leur opinion, de la modifier éventuellement ou de fournir les raisons pour lesquelles ils s'écartaient de l'opinion généralement acceptée. Cette deuxième opération permit d'en arriver à une convergence d'opinion et renforça les positions du groupe médian.

La recherche montre que l'éducation en plein air est un mélange de deux concepts: c'est une éducation "pour le" et "au sujet du" plein air, où l'accent est mis sur le développement d'attitudes, d'habiletés et de connaissances du plein air; d'un autre côté, elle est considérée comme un apprentissage "par" le plein air; c'est un procédé qui sert alors à l'enrichissement du programme d'enseignement, où le plein air est vu comme un moyen d'atteindre les objectifs d'éducation à l'extérieur de la salle de classe. L'étude s'achève par une série de recommandations pour le programme d'éducation en plein air de l'Université Laval.

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ABSTRACT

OUTDOOR EDUCATION AS SEEN THROUGH A DELPHI SURVEY OF SELECTED GROUPS OF EXPERTS IN THE PROVINCE OF QUEBEC, CANADA, U.S.A., AND OVERSEAS AND IMPLICATIONS FOR THE OUTDOOR EDUCATION CURRICULUM AT LAVAL UNIVERSITY, QUEBEC

By

Georges-André Nadeau

Purpose

The purpose of this study was to explore the Outdoor Education movement as perceived by selected Outdoor Education leaders and experts in Quebec, other Provinces of Canada, the United States, and overseas, in order to draw inferences and recommendations for an Outdoor Education curriculum at Laval University, Quebec.

Procedure

A list of 97 statements was drawn from literature, interview suggestions of some Michigan State University faculty members, and the researcher's own extensive experience in Education Plein-Air/Outdoor Education (EPA/OE).

The Delphi method was used to gather information by means of a series of carefully constructed bilingual questionnaires. The Delphi system has been developed, on a general level, to provide an alternative to committee approaches for the processing of group opinion. The process used was one of obtaining a controlled set of

feedback from a small group of experts in each of four samples: Quebec, other Provinces in Canada, the U.S.A., and overseas. Questionnaires were systematically employed to gather data which were then analyzed and placed in a form suitable for possible group decision-making purposes.

The study consisted of two questionnaire phases which were mailed to each participant. Prior to Phase I, a list of statements concerning five basic elements of a rationale in Outdoor Education was constructed from the researcher's basic assumptions and from the review of related French and English literature. The rationale statements were divided into five parts according to the five basic elements identified.

In pre-Phase I, the instrument was administered to a select sample for refinement and to test the content validity through the judgment of experts as to what should be emphasized in a course of study.

The application of the experts' judgment to the 97 rationale statements contained in the original list of elements divided as follows constituted the activity for Phase I (these forms invited experts to evaluate statements, suggest modifications, and express opinions):

I. Definitions of EPA/OE
II. Objectives of EPA/OE
III. Social and Cultural Environment
IV. EPA/OE and Learning
V. EPA/OE and Teacher Education Curriculum

The Phase II instrument was a composite of the statements and modifications gathered from Phase I. The objective of Phase II was to ask experts for reconsideration of their Phase I opinion, after they had had the opportunity to review the feedback received from the other experts.

Responses to the initial Delphi questionnaire were reviewed, analyzed, and the mean and standard deviation computed for each rationale statement. These data were noted on the Delphi II questionnaire.

Each respondent was offered the opportunity to modify his position. In cases where his responses to an item differed from the consensus indicated by the mean and standard deviation, he was asked to give specific, written reasons for his departure from the central range of the total group response.

Phase II created a convergence of opinion, a narrowing of range of opinion, and a strengthening of group median positions.

Major Findings

As a result of this study, the researcher has interpreted the picture of the Quebec EPA/OE to be a blending of the two following concepts: education for and about the outdoors, including an emphasis on attitude development and outdoor skills and knowledge; and on the other hand as learning through the outdoors as a process for curriculum enrichment in which the outdoors are seen as a unique setting for achieving educational objectives outside the classroom.

The researcher concluded with a set of recommendations for the Outdoor Education Program at Laval University, Quebec.

OUTDOOR EDUCATION AS SEEN THROUGH A DELPHI SURVEY OF SELECTED GROUPS OF EXPERTS IN THE PROVINCE OF QUEBEC, CANADA, U.S.A., AND OVERSEAS AND IMPLICATIONS FOR THE OUTDOOR EDUCATION CURRICULUM AT LAVAL UNIVERSITY, QUEBEC

By

Georges-André Nadeau

A DISSERTATION

Submitted to
Michigan State University
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1976

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Special acknowledgment is given to those participants who spent long, tedious hours in providing the data which formed the very heart of this study. Their names are listed individually in Appendix E.

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CHAPTER I

INTRODUCTION

Of the many changes which occurred in Quebec education during the last 10 to 15 years, Outdoor Education[1] is one which has shown a tremendous rate of growth.[2] Educators at all school levels are trying to enrich curricula through more effective use of the outdoors--*à travers* "Le Plein-Air."[3]

The phenomenon of "EPA"/OE in Quebec, however, takes on many different perspectives depending upon the angle from which one looks. The bilingual and bicultural characteristics of Quebec contribute to the development of a unique basis for Education Plein-Air/Outdoor Education.

The present study examines the Quebec "Education Plein-Air" (EPA) phenomenon and compares it to Outdoor Education in the United States, Canada, and selected overseas countries.

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[1] Or the comparable term used in Quebec: "L'Education Plein-Air" (EPA).

[2] Guy Pinard, "Les Classes de Neige Depuis 1962, Leur Popularité n'a pas Cessé de Grandir," *La Presse*, 17 Février 1968.

[3] Dollard Morin, "Loisir et Récréation: 200 Garcons et Filles de Montréal Nord Iront en Classe de Neige," *La Presse*, 3 Janvier 1968; Dollard Morin, "Des Jeunes Découvrent des Horizons Nouveaux Grâce au Camp de Neige," *La Presse*, 17 Janvier 1968; Suzanne St-Denis, "Outdoor Education: Enquête sur les Classes de Neige," *Centre Pilote Laval*, Novembre 1969.

Background of the Problem

The Province of Quebec is now facing a remarkable and fast-growing phenomenon: the use of the outdoors in education or "Education Plein-Air (EPA)." Indeed, 10 years ago, EPA/OE in Quebec was almost nonexistent. School systems and many provincial agencies are still trying to cope with this turbulent newcomer in the field of education.[4]

Three major events are worthy of note concerning Quebec Education Plein-Air. First, the Quebec Board of Education, in its *Rapport Parent*, recommended in 1964 that some type of Outdoor Education be included in each school curriculum.[5] Second were the new directives from the Quebec Board in Education in *Règlement No. 7*,[6] recommending half a day of Education Plein Air per week in the school systems. And third, the recent creation of a provincial organization for leisure and outdoor sports for youth called *Le Haut-Commissariat*

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[4] Gouvernement du Québec, Ministère de l'Education, *Guide d'Implantation des Activités de Mouvement (Sport, Plein-Air, Expression Corporelle)*, Section 2, *Travail en Fonction des Déplacement Divers* (Document de travail non-publié) (Québec, Septembre 1972); Gouvernement de Québec, Ministère de l'Education, *Guide d'Implantation des Activités de Mouvements (Sports, Plein-Air, Expression Corporelle)*, Section IV--*Travail en Fonction de Rythmes Variés (Elémentaire)* (Québec, Octobre 1972).

[5] Alphonse-Marie Parent, *Rapport de la Commission Royale d'Enquête sur l'Enseignement de la Province de Québec*, Tome II, *Structures Pédagogiques du Système Scolaire* (Montréal, 1964), p. 167.

[6] *Règlement No. 7*, Articles 28, 31, 32, 33 (Québec).

pour la Jeunesse, Loisirs et Sports (HCJLS)[7] for the promotion of sports and outdoor pursuits.

Statement of the Problem

In spite of all the efforts of administrators and educators, the Education Plein-Air movement in Quebec is still difficult to define for the following reasons:

1. The impact of two separate and strong influences, one coming from some countries in Europe with a traditional health concern, and the other from the United States and Canada with a multidisciplinary learning approach with an emphasis on sciences: natural and physical sciences.

2. The recommendation, without follow-up, of the 1964 *Rapport Parent*,[8] that put forward the French approach of Dr. Fourastier,[9] who was concerned primarily with the lack of students' physical fitness in the French schools.

In 1947, Dr. Fourastier conducted an experiment for one month in an outdoor setting (ski centre). Half a day was used for academic subjects and was called *Le Mi-Temps Pédagogique*. The other half of the day provided outdoor sport activities with emphasis on Alpine skiing (downhill skiing); it was called the *Mi-Temps Sportif*.

---

[7] *Gouvernement du Québec, Ministère de l'Education, Le Service de la Jeunesse du Loisir et du Plein-Air: Problématique et Orientation Générales* (Québec, 1971), p. 19.

[8] *Parent, Rapport, Tome II.*

[9] *Gouvernement du Québec, Enquête Corps* (MEQ, 1970), p. 169.

The results of the study showed that the academic achievement of the students was about the same, but the physical fitness of the students increased significantly.[10]

3. The lack of a sound philosophy. Indeed, Quebec seems to be still in a terminology war, seeking definitions, and realistic and well-defined goals concerning the phenomenon of Education Plein-Air/Outdoor Education.

Need for the Study

Education Plein-Air/Outdoor Education in Quebec was almost nonexistent prior to the recomendation of the *Rapport Parent* in 1964. In a 1974 survey of the Quebec Board of Education, it was indicated that 58 percent of the French Canadian schools had some type of Education Plein-Air experience.

Such rapid growth did not occur without problems and confusion[11] concerning the conceptual foundations of EPA/OE and the implications for the school curriculum. Sound research in the field of Education Plein-Air/Outdoor Education is, unfortunately, very scarce. Indeed, no sound study has ever been done concerning the development of a rationale for EPA/OE in Quebec in order to give a coherent and sound basis for Outdoor Education experiences in the French-Canadian schools.[12] Such weakness is obvious when one looks at the small amount of literature related to Education Plein-Air/Outdoor Education in Quebec.

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[10] *Ibid.*, p. 168.

[11] Michel Maldague, *Problématique de la Crise de l'Environnement* (Québec: Université Laval, 1973).

[12] "Il est très important que les municipalités, les mouvements et les associations comprennent qu'il faut élaborer et approfondir, au plus tôt, notre pensée dans le domaine du plein-air, afin

The fact that Quebec is bilingual and bicultural adds a new dimension to the problem of rationale building. The language barrier left Quebec isolated from American and Canadian material for a long time. During this period, Quebec educational leadership was coming from France.[13] Now the Anglo-Canadian and American influences seem to play an important role in the development of Education Plein-Air in Quebec.[14]

An investigation into each of these influences will help to determine the nature and different components of the Outdoor Education movement in Quebec.

Isolated experiences[15] in the Quebec outdoors were, for the most part, tainted with religion and romanticism. The emotionalism of these types of experiences[16] did not assist very effectively in

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d'offrir quelque chose d'original qui puisse soutenir la compétition avec le loisir plein-air commercialisé (même s'il est de bonne qualité), car il nous semble qu'il y a conflit d'intérêt lorsqu'on veut faire fructifier un capital en accueillant des enfants, des adolescents, des jeunes travailleurs pendant leurs vacances, et en même temps pourvoir à leur épanouissement humain." Confédération Québecoise du Plein-Air, *Premier Manifeste de la Confédération Québecoise du Plein-Air* (Québec, June 1969).

[13] Parent, *Rapport*, Tome II.

[14] Office Franco-Québecois Pour la Jeunesse, *Sport et Plein-Air*, Section de Québec.

[15] See Bibliography.

[16] Claudia Pagé, Les Expériences de Mi-Temps Pédagogiques de la Province de Québec (Centre Pilote Laval, Novembre 1969); Rénée Rowan, "Après la Classe de Neige, Rien n'est Plus Comme Avant," *Le Devoir*, 7 Février 1972.

the realization of the general goals of education. Recent innovations in education and changes in social and cultural values, however, have led the way to the use of the outdoors for educational purposes. Educators are starting to give more recognition to Education Plein-Air/Outdoor Education and realize the potential contribution of the outdoors to education.[17]

Three recent circumstances have made this study very relevant. First, pressures have come from school boards requesting "Education Plein-Air" programs to become a part of the regular curriculum. From 1972 to 1975, the Quebec government (HCJLS) had a budget of three million dollars for "Education Plein-Air" leadership in various schools/agencies in the province.[18] Second, some universities, such as Laval University, are considering starting a curriculum for leaders in "Education Plein-Air"/Outdoor Education. The professional preparation would help to assure effective leadership in schools and would likely contribute to the enrichment of the entire school curriculum. Third, one of the recommendations of the *Association des Professionels de l'Activité Physique* (APAPQ), *Division Plein-Air*, conference in Montreal in 1974,[19] was to conduct an in-depth study in order to give to Education Plein-Air a sound rationale and conceptual framework in which to operate.

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[17] F. Doucet, *Etude sur le Plein-Air Pédagogique* (Québec: Ministère de l'Education, Juin 1970); Service du Moyens Techniques d'Enseignement (STME), *Le Plein-Air, C'est Quoi?* Elémentaire, 2^{e} cycle (Montréal, 1969).

[18] Gouvernement du Québec, Ministère de l'Education, HCJLS, Service de la Jeunesse du Loisir et du Plein-Air: "Plan Budgetaire Triennal du 1er Avril, 1971 du 31 Mars, 1975," Document du Travail No. 1, Copie revisée (Québec, 1971).

[19] Georges-André Nadeau, "L'Education Plein-Air au Québec: Mythe ou Realité?" Conférence, Congrès, A.P.A.P.Q. (Montréal, 1974).

This study serves to meet the needs cited above as it attempts to analyze the Education Plein-Air/Outdoor Education movement in Quebec.

Purpose of the Study

The purpose of this study was to explore the Outdoor Education movement as perceived by selected Outdoor Education leaders and experts in Quebec, Canada, the United States, and overseas in order to draw inferences and recommendations for an Outdoor Education curriculum at Laval University, Quebec.

Specifically, this study will be achieved as follows: First, examine and analyze through the literature the historical development of Outdoor Education in Quebec. Second, identify the basic elements, criteria, and determining factors for a sound curriculum in Outdoor Education which considers the European, Canadian, and American influences, but still remaining typically *Québecois* based on the cultural, geographical, and historical uniqueness of French-Canadian schools. Third, through the Delphi technique, submit to a jury of experts in Quebec, Canada, the United States, and some countries in Europe a series of statements regarding the basic components of the rationale in order to analyze the major influences and determine the guiding principles of the "Education Plein-Air"/ Outdoor Education movement in Quebec. And finally, draw inferences and implications for a current rationale that can serve as a basis for designing an Outdoor Education Curriculum for French-Canadian public schools and for professional preparation for leaders of the Province of Quebec.

Methodology: The Delphi Technique

The Delphi technique was used to gather opinions of selected experts and leaders in the area of Outdoor Education in Quebec, Canada, the United States, and overseas.

Delphi is a process designed to obtain a controlled set of informational feedback from a small group of selected experts regarding a specific area of knowledge. Delphi questionnaires were used to gather information systematically, which was then analyzed and summarized.

In considering future innovations in education in 1966, Helmer, an originator of the Delphi research method, concluded:

> The earliest time that one might now hope to affect [educational reform] is the mid-seventies, and the direct influence of any present reform may well still be felt . . . through the first quarter of the twenty-first century. . . . Some of these forecasts may be based on existing demographic and economic models, but intuitive judgement is likely to play a dominant role throughout, making something like a Delphi approach virtually mandatory.[20]

The Delphi technique places emphasis on the intuitive judgment of experts. Such judgment is an expertise that grows from personal experience and knowledge of possible occurrences in a specialized area.

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[20] O. Helmer, Social Technology (New York: Basic Books, 1966), p. 24.

Page 9 marguerite

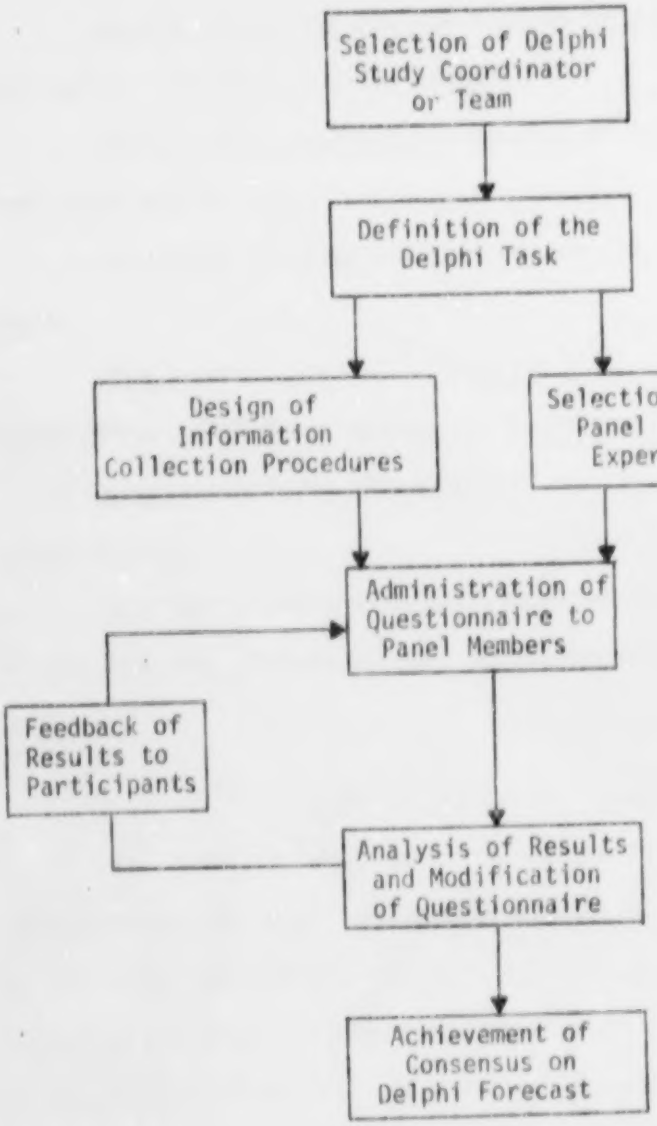
Selection of Delphi Study Coordinator or Team
Definition of the Delphi Task
Design of Information Collection Procedures
Selection of Panel of Experts
Administration of Questionnaire to Panel Members
Feedback of Results to Participants
Analysis of Results and Modification of Questionnaire
Achievement of Consensus on Delphi Forecast

Figure 1.--Major stages in Delphi technique.

Source: D. W. Cravens, G. E. Hills, and R. B. Woodruff, Marketing Decision-Making Concepts and Strateties (Homewood, Ill.: Richard D. Irwin, Inc., 1976).

Outdoor Education (OE)--A tool to be used for the purpose of curriculum enrichment (United States).

Professional preparation--Courses of study leading to a college level degree and a teaching certificate.

Rationale--Fundamental reasons for, or expositions of principles.

HCJLS--*Haut Commissariat de la Jeunesse, des Loisirs et des Sports* (Provincial Organization for Youth, Leisure and Sports).

Canada--Anglo-Canadians of all the Canadian Provinces, except Quebec.

Overseas--Sample of experts representing the following countries: England, France, Sweden, Egypt, Venezuela, and the Netherlands.

Limitations of the Study

The concepts (related to "Education Plein-Air"/Outdoor Education and its basic components) expressed by experts' opinions in the study involve only the personal beliefs of each individual regarding the areas of inquiry brought up in the questionnaires. It is entirely possible that the opinions expressed by this sample of individuals are not representative of the national or provincial trends and sentiments.

The effects of history, mortality, and maturity also may confound the data in this study.[23] Events may occur between the time of filling out the initial and the final questionnaires which may unduly affect the expert's response. This problem is inherent in a longitudinal study of this nature. Subject mortality is also a danger, in that participants may drop out of the study at any point, and thus confuse the accuracy of the comparisons made between the opinions of the group in the initial and final phases of the Delphi. Mortality is also a problem in considering within-response consistency. The researcher cannot determine why a participant did not answer a given question within the body of the questionnaires, and how such omissions might affect the final validity of the data collected and analyzed.

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[23] D. T. Campbell and J. E. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally College Publishing Co., 1963), pp. 13-16.

Generalizability is also a problem, in that the recommendations for the training of Quebec Outdoor Education leaders are limited to the French-Canadian population of the Province.

Translation difficulties might enter the picture as well, in that the original text of most statements appeared in English, and was necessarily translated into French for the benefit of the Quebec participants. Although this task was performed by a professional, there are phrases and terms in both the French and English which do not lend themselves readily to expression in the other language.

Experimenter effects through the personal interaction which took place between the experimenter and the participants in the administration of the Delphi I questionnaire could also serve to confound the impartiality of the responses. This personal contact was unavoidable, however, because of the six-week mail strike in

Canada which continued over the period of the initial data collection.

Overview

In Chapter I, the problem has been presented along with the basic elements for the rationale suggested in the study. Chapter II contains a review of literature pertinent to the purpose of the study. Procedures for gathering information through the Delphi technique are presented in Chapter III. Chapter IV provides an analysis of results. Finally, a summary of conclusions and recommendations constitutes Chapter V.

CHAPTER II

REVIEW OF RELATED LITERATURE

Literature in Quebec

The review of related literature in Quebec provided the basis for the basic elements of the rationale used in the Delphi questionnaires.

Although the Province of Quebec has very limited relevant research in Outdoor Education as yet, some empirical soundings and articles have been written about the experiences of different schools[1] in Quebec outdoor settings that might lead us to some basic elements of the rationale for Outdoor Education curriculum.

An extensive review of literature through over 150 descriptor terms[2] concerning the domain of physical sciences and Education Plein-Air/OE in both French and English was conducted in order to investigate and analyze the Quebec movement of Outdoor Education, its origins, objectives, instructional models, and evaluation techniques of current programs.

The first concern for "Education Plein-Air" in Quebec was a sanitary and health concern. The French influences came into Quebec from Dr. Max Fourastier, who first tried in 1947 to improve the fitness of students through "Education Plein-Air"/Outdoor Education activities with emphasis on physical fitness. The approach used was "*le Mi-Temps Pédagogique et le Mi-Temps Sportif*."[3] Most of the outdoor experiences mentioned in Quebec literature originated from the French movement.[4]

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[1] MEDDLARS, Medicine Tape Services, Canadian Institute for Science and Technological Information, N.R.S., Ottawa, Ontario. K1A 0S2.

[2] *Parent, Rapport, Tome II, p. 168.*

Georges Hebert[5] had the same objectives, but used basic natural movements such as walking, running, climbing, and crawling in a natural setting. He had, and still retains, an influence in the movement called "*Hébertisme*."

It seems that the most prevalent type of outdoor experience in Quebec was imported from France and implemented in Quebec public schools.[6] Due to the language used in the French schools the French literature was the only readily available work, and therefore the French influence in French-Canadian schools was a natural result.[7]

The new bilingual status of Canada provided Education Plein-Air/Outdoor Education with many translations of research materials and literature in the last three years. Also, more educational exchanges have taken place, and changed the major directives of Education Plein-Air/Outdoor Education in Quebec.

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[3] *Ibid.*, p. 167.

[4] C. Cousineau, Profil du Plein Air Pédagogique (Ottawa: Université d'Ottawa, 1971), p. 57.

[5] R. Vuillemin, La Méthode Naturelle d'Hébert (Paris: Les Grandes Editions Françaises, 1948), p. 127.

[6] Parent, Rapport, Tome II, p. 168.

[7] "Aux Classes de Neige du Mont Plante--Les Etudes, le Matin, le Ski . . . l'Après-Midi," Photo-Journal, Sem. 14 au 21 Fév., 1968.

Concerning the objectives of Outdoor Education, Claude Cousineau found in 1971 very ambiguous objectives in "Education Plein-Air"/Outdoor Education.[8] Among the few objectives mentioned were the following:

--to improve teacher/student relations

--to increase relevance of instructional experiences

--to close the gap between intellectual and physical capacities

--to understand the bio-physical environment

--to reform teaching methods

One of the reasons for this diversity in the Outdoor Education objectives might be the fact that most Outdoor Education programs have been originated by Health, Physical Education and Recreation (HPER) leaders[9] who had a uni-disciplinary type of formation in HPER and no professional preparation in Outdoor Education, which is a multi-disciplinary approach.

A provincial sounding, "Operation CORPS"[10] in 1970, mentioned that out of 64 regional school districts, 67 percent had the physical education instructor as responsible for the Outdoor Education program.

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[8] Cousineau, *Profil du Plein Air Pédagogique*, p. 12.

[9] Gouvernement du Québec, *Enquête CORPS: Plein-Air*, 1970, p. 1; R. Avossa, Gouvernement du Québec, Ministère de l'Education HCJLS, Service de Planification, *Participation des Québecois aux Activités de Loisir*, Rapport d'Etape No. 1, Exploitation de l'Enquête CORD-8M sur les loisirs de Plein-Air, 1974, p. 93.

[10] Gouvernement du Québec, *Enquête CORPS: Plein-Air*, 1970.

In a provincial survey, the South Shore Protestant Regional Board in Montreal mentioned the need for teacher education in Outdoor Education in the following terms: "*On déplore que les cadres n'aient pas de formation adéquate. Un programme pour la 'Formation des Maîtres' dans le domaine du Plein-Air, serait un premier pas: on suggère une année.*"[11]

The indecision in the choice of objectives seems to reflect the lack of fundamental reasoning or rationale for Outdoor Education.

Of all outdoor experiences carried on in school systems, "*la classe de neige*" is still the most popular type in Quebec. The geography and climate of Quebec may explain this fact.[12]

The French influence is well-noticed[13] in the "*Mi-Temps Pédagogique et le Mi-Temps Sportif*," which still appear to be the most popular of the health-based approaches.[14]

In the last few years, with the "*classes de neige, classes vertes, rouges ou jaunes*,"[15] it seems that a different trend is coming in from the United States.[16] Indeed, the original programs issued from physical activities in the outdoors appear to be more flexible, and leave room for an integration of the ecological concerns and a multi-disciplinary approach.[17]

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[11] Protestant School Board of Greater Montreal, *Outdoor Education*, 1972.

[12] *Cousineau, Profil du Plein Air Pédagogique.*

[13] *Pagé, Les Expériences de Mi-Temps Pédagogique.*

[14] *Cousineau, Profil du Plein Air Pédagogique, p. 12.*

[15] *France Dion, "Classe de Neige, Programmation et Evaluation," Ecole Normale de Mérici, (Québec, 1970); Jeunesse (Club), Les Classes de Neige: Stage Pédagogique Tenu à l'Auberge de la Seigneurie, Mars 1970; Ste-Foy (Commission Scolaire), Projet "Operation" Rouges, Noirs, Blanches (Ste-Foy, 1967); Rowan, "Après la Classe de Neige."*

Eighty-six different descriptor terms on the subject of professional preparation in health, physical education and recreation and outdoor education in Quebec have been researched through Educational Resources Information Center (ERIC),[18] and four other documentation centres[19] through *Le Laboratoire des Sciences de l'Activité Physique (LABSAB, Université Laval)*, covering the material published in the area from 1970 to 1975. The area of Health, Physical Education and Recreation was closely researched because in Quebec over 75 percent of the Outdoor Education programs are founded and directed by physical educators.[20]

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[16] Charles Lewis, "Integrating Outdoor Education Into the Curriculum," JOHPER 40 (June 1969): 63-64; Clifford E. Knapp, "Innovations in Outdoor Education--Principles and Practices," Illinois Journal of Education 58 (September 1967): 10-12; John Loret, "Happening in the Out-of-Doors. Interdisciplinary Experiences in Outdoor Education," Journal of Health, Education and Recreation 40 (April 1969): 45-56

[17] *Doucet, Etude sur le Plein-Air Pédagogique; P. Larue, "Plein-Air: Définition du Plein-Air Dans le Contexte Québecois," Sports et Loisirs--Education Physique 4,2 (1968): 37-47.*

[18] ERIC (Education), SBT Division, National Library, 395 Wellington Street, Ottawa, Ontario, K1A 0N4.

[19] Science Citation Index, Social Sciences Citation Index, GRA Government Report, Tape Services, CIFTI National Research Council, Ottawa, Ontario, K1A 0N4.

[20] *Gouvernement du Québec, MEQ, Enquête CORPS: Plein-Air, Québec, p. 1.*

The first provincial meeting regrouping Outdoor Education leaders happened in 1974 in Montreal. One of the major recommendations was to conduct a thorough study in all Quebec schools in order to determine the bases and fundamental reasons for Outdoor Education in Quebec.

According to the literature reviewed, there has been no study done which develops such a basis for the rationale for Outdoor Education in Quebec, and subsequent inferences to professional preparation for Outdoor Education leaders.

The first investigation was done in 1969 by Michel Maldague of Laval University, on environmental education. His purpose was to identify the content, intensity, and the didactics of teaching "*conservation de la nature*" in Quebec. The procedure used was a questionnaire with 46 centers of interest (water cycle, tree study, etc.). To each center of interest, the respondent indicated the depth of study and educational tools employed. Nine educational tools were listed. One of them, directly related to Outdoor Education, "*sorties dans le milieu*," was used in the teaching of nature conservation.

The results of Maldague's 1969 study demonstrated that 3.5 percent of classes participated in "arboretum visits," 9.2 percent in "*classes vertes*," 11.6 percent in "botanical garden visitations," and 29.4 percent in "guided excursions." In the study, more than 95 percent of the teachers involved saw a need for structuring the study of nature conservation.[21]

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[21] *Michel Maldague, "Education en Conservation de la Nature en Québec," (Québec: Faculté de Forestrie et de Géologie, Université Laval, 1969).*

Maldague concluded by showing a weakness in these terms:

> *Il est clair . . . que l'enseignement* [conservation education] *donné actuellement dans les écoles de la province, se caratérise par une grande faiblesse: certains aspects sont touchés d'une manière généralément superficielle et sans interpretation dans un ensemble coordinée.*[22]

J. C. Cousineau[23] of the University of Ottawa, Ontario, Ontario, carried out a study in 1970-71. Its purpose was to construct a profile of Outdoor Education, but the results were based only on affirmative answers. No attention was given to negative answers.

Another provincial study, Enquête CORPS,[24] was done in 1970. The purpose of the investigation was multiple, with one important question: "Who is in charge of Outdoor Education in Quebec schools?" The results were as follows: In 40 percent of the cases, the physical educators were responsible for the Outdoor Education program (cross-country skiing and down-hill skiing were given as the most popular activities of the schools involved).

The recommendations of the commitee mentioned the absence of professional preparation for Outdoor Education leaders and proposed:

1. that Outdoor Education become an integral part of the teacher's education
2. that the Physical Education curriculum for teachers include Outdoor Education activities

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[22] *Michel Maldague, "Union Internationale pour la Conservation de la Nature et de ses Ressources," Vol. IV (Suisse, 1970), p. 74.*

[23] *Cousineau, Profil du Plein Air Pédagogique.*

[24] *Gouvernement du Québec, MEQ, Enquête CORPS.*

3. that a program committee integrate an Outdoor Education course of study in the teacher education curriculum.[25]

Discussion

Studies in Quebec Education Plein-Air/Outdoor Education reviewed in this section indicated no sign of homogeneity, coherence, and sound philosophical foundations. Even though the French *Mi-Temps Pédagogique et le Mi-Temps Sportif* played a central role in the evolution of Quebec Education Plein-Air, most of the articles and reports researched (cf. Bibliography) indicated an urgent need for research in EPA/OE and leadership training.

With the creation of a special project in Education Plein-Air at the 1972 annual conference in Montreal, the *Association des Professionels de l'Activité Physique du Québec* (APAPQ) brought together over 200 people interested in Education Plein-Air/Outdoor education. The results of this conference indicated considerable interest and energy, but also problems and confusion concerning the nature of Education Plein-Air itself, and how Education Plein-Air can contribute to the goals of physical education and general education as well.

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[25] Translated from *Gouvernement du Québec*, MEQ, *Enquête CORPS*.

American Literature[26]

The review of American literature in Outdoor Education was well undertaken by Weiner in 1965.[27] Early studies in camping as education and studies in Outdoor Education and school camping were reviewed in the perspective of the influences of two key leaders in the field of Outdoor Education in the United States: L. B. Sharp and Julian W. Smith.

Compared to Quebec, Outdoor Education in the United States developed very early and showed much more maturity and sophistication. The breadth and diversity of the American Outdoor Education movement is well expressed in a publication of the AAHPER in 1973 by Hammerman, Stark and Swan, in which 117 doctoral studies completed in the past three decades are reported.

The analysis of the Delphi questionnaires in the present study will assist in the verification of the characteristics of the American Outdoor Education movement.

For the period from 1965 to 1975, an ERIC search (USA) provided over 2,053 abstracts of articles and books concerning Outdoor Education and teacher education in Outdoor Education and related fields of study (see Bibliography). However, the major research for this span of time has been reviewed by Hammerman et al. in Research in Outdoor Education. Out of 43 doctoral dissertations written in the last 10 years, 18 were classified under Teacher Education, 25 in Evaluation, 9 in Proposals for New Programs, 4 in Historical Analysis, and 4 in Administration and Organization.

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[26] A review of USA literature was reported here only briefly because of the special impact of American OE on Quebec's EPA.

[27] Morris Weiner, "Rationale in Outdoor Education" (Ph.D. dissertation, Michigan State University, 1965). Weiner reviewed the historical development of OE and constructed a profile of two key leaders in the Outdoor Education movement: L. B. Sharp and Julian W. Smith.

The last ten years witnessed a higher degree of sophistication in the patterns of curriculum experiences in American Outdoor Education. The energy crisis generated an increase in research mainly in conservation education, environmental education, and science education.[28]

Indeed, American literature expressed a great diversity concerning the concepts of Environmental Education, Science Education, and Outdoor Education. It might be appropriate to provide a brief comparison and contrast of philosophies, purposes, and techniques.

Outdoor Education vs. Environmental Education

Outdoor Education and Environmental Education are based primarily on the following premises: "Leave to the child the burden of pursuing his own education" (John Gardner), and that a transfer of learning is more likely to occur when the experiences are similar.

Definitions.--While Outdoor Education involves "learning in and for the outdoors,"[29] Environmental Education involves the understanding of the natural environment and factors limiting human life. In this perspective, according to Novak,[30] Environmental Education appears to be the extension of Outdoor Education.

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[28] Julian Smith et al., Outdoor Education (Englewood Cliffs, Ner Jersey: Prentice-Hall, 1963); Donald R. Hammerman and William H. Hammerman, eds., Outdoor Education: A Book of Readings (Minneapolis, Minn.: Burgess Publishing Company, 1968); G. W. Donaldson and Oswald Goering, Perspectives on Outdoor Education: Readings (Dubuque, Iowa: Wm. C. Brown Co., Publishers, 1972).

[29] Smith et al., Outdoor Education.

Philosophy.--L. B. Sharp, father of Outdoor Education, showed us the way with "that which can be best learned outside the classroom . . . should there be learned." Outdoor Education is considered to be learning for what is real.[31] Its primary purpose is the sharpening and deepening of all school curriculum offerings.[32] Outdoor Education aims at mental and physical fitness, including the affective domain.[33]

Environmental Education is more concerned with the total human environment, its cultural, social, political, economical, and aesthetic as well as physical and biological aspects. Environmental Education aims at understanding the natural environment and man's interrelations with it.

Techniques.--Outdoor Education is an inter-disciplinary learning process using the inquiry, problem-solving, and multi-sensory approach in the outdoors. Outdoor Education uses the outdoors for educational purposes, as a learning tool, as a means, not ends, for the enrichment of inside learning in all subject matter areas of the curriculum. It is considered by C. Blackman[34] to be "an injection of reality" into the curriculum offerings.

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[30] Paul F. Novak, "Education in and About Our Environment," Journal of Outdoor Education 5 (Winter 1971): 6.

[31] Earl C. Kelly, Education for What Is Real (New York: Harper & Brothers, 1947).

[32] J. W. Smith, "Outdoor Education as a Method of Teaching Reading: Irvington Outdoor Education Center, New Jersey," Journal of Reading 12 (December 1968): 229-33.

[33] George Donaldson, School Camping (New York: Association Press, 1952).

While Outdoor Education focuses on awareness, understanding, and appreciation, Environmental Education emphasizes the understanding of the natural environment, its basic elements, and man's interrelations with it. The instructional models of Environmental Education are quite similar to those used in Outdoor Education; however, Environmental Education does not necessarily need to be in the outdoors--a pond study could well be undertaken without going outside the classroom. Environmental Education is an "intra-disciplinary learning process" using similar approaches (inquiry, problem-solving, discovery) to those found in Outdoor Education, but placing less emphasis upon the multi-sensory approach.

Relationship of Science Education and Outdoor Education

The 1960's and 1970's have witnessed some very fundamental social and educational changes in our industrial society. Indeed, the explosion of knowledge, new learning theories, and the stress on the acquisition of facutal information have largely contributed to the innovations in general education, Science Education, and Outdoor Education as well.

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[34] Charles Blackman, "A Curriculum Specialist Looks at OE," Journal of Outdoor Education, Vol. 3, No. 3, Spring, 1969.

While Science Education appears to be a systematic and organized body of knowledge as well as a process for learning when dealing with how children learn and think, Outdoor Education, on the other hand, appears to be the educational resource which brings reality and relevance to science by dealing with what is real.

Secondly, while Science Education attempts to develop scientifically literate and personally concerned individuals with a high competence for rational thought and action, and also tries to create in students the ability to cope with new, unexpected findings, Outdoor Education intends to sharpen and deepen learning in all curriculum offerings, including science. Outdoor Education seems to be the best equipped laboratory for learning science.

Although the methods of classroom science differ slightly from those of the outdoors, scientific skills (observation, data collection, interpretation) can be best developed in the real world, dealing with the living and nonliving things. The multi-sensory approach used in the outdoors will provide an outstanding learning experience for science and other subject matter areas as well. There is no substitute for this unique contribution of Outdoor Education.

Finally, the outdoors gives a special significance to certain fields of science, such as astronomy, botany, chemistry, ecology, zoology, geology, paleontology, and physics.

CHAPTER III

PROCEDURE FOR GATHERING INFORMATION

Research Questions

Due to the nature of the study, it was deemed impossible to develop hypotheses in the typical fashion. Instead, three research questions were developed. They are as follows:

1. What is the degree of agreement or disagreement (SA, A, N, D, SD)[1] concerning the following basic elements of "Education Plein-Air"/Outdoor Education?

   a. Definition of Outdoor Education
   b. Objectives of Outdoor Education
   c. Social and Cultural Environments
   d. Learning Processes/Outdoor Education
   e. Teacher Education Curriculum

2. What are the major similarities and differences in the status of Outdoor Education in the Canadian, American, and European movements which may have influenced the Quebec Outdoor Education movement?

3. What inferences may be drawn from the results of this research which may be translated into recommendations for the improvement of the Outdoor Education Teacher Curriculum at Laval University?

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[1] See Appendix C, research instrument.

Sample and Population

The population for the study was a selected set of individuals working in Outdoor Education and related fields, grouped as follows: the Province of Quebec (Group I), Canada other than Quebec (Group II), the United States (Group III), and the following other countries--France, England, Sweden, the Netherlands, Venezuela, and Egypt (Group IV).

Broadly defined, participation was limited to those "Education Plein-Air"/Outdoor Education leaders and/or experts who are highly skilled in influencing policy decisions at local, provincial/state, or national levels of EPA/OE and its educational staff development. In the four groups investigated, representatives were chosen from individuals associated with private and public organizations and agencies, including universities (professors and instructors), boards of education (members), school boards (consultants), governmental and private agencies, and provincial/state organizations.

The population also included educators involved with teacher preparation and outdoor leadership training programs in Quebec, Canada, and the United States.

A sample of 84 participants for the four groups (French-Canadian in Quebec, Anglo-Canadian in other Canadian provinces, the United States, and overseas) was selected. The sample list had been developed through contacts the researcher had acquired over several years of Outdoor Education and Teacher Education involvement, through recommendations from members of the Michigan State University faculty, Laval University colleagues, and members of the researcher's doctoral committee.

The sample of "Quebecois," Canadian, and American respondents was selected by means of several criteria. An individual was included if he satisfied one or more of the following:

--recommended by a recognized leader or expert in "Education Plein-Air"/Outdoor Education,

--a leader or professional staff member to a local, provincial/state, or national organization in "Education Plein-Air"/Outdoor Education or related fields,

--highly committed to an organization which had "Education Plein-Air"/Outdoor Education as its central interest.

The sample of the overseas participants was selected from the list of experts associated with the 1975 International Environment Education Program in Belgrade sponsored by the United Nations Educational, Scientific, and Cultural Organization (UNESCO).

Description of Sample

A letter of introduction (Appendix D) from the chairman of the doctoral dissertation committee was sent to the 84 potential participants in Quebec, Canada, the United States, and overseas (France, England, Sweden, the Netherlands, Venezuela, and Egypt). Two weeks after the contact letter, 84 Delphi I Questionnaires were sent out (cf. Appendix C): Quebec (Group I) n=28, Canada (Group II) n=20, the United States (Group III) n=26, and overseas (Group IV) n=10. (For a complete list of the participants, see Appendix E.)

Because of the Canadian mail strike in November 1975, the Delphi I was distributed personally by the researcher to most of the Quebec participants (see Table 1).

Table 1.--Sample contacts and participation: Delphi I.

Group	Participants Contacted	Actual Participation	Percent Participation
I. Quebec	28	26	92.05%
II. Canada	20	18	90.00%
III. U.S.A.	26	24	92.31%
IV. Overseas	10	6	60.00%
Total	84	74	88.1%

In Phase II, 74 Delphi II Questionnaires were sent out to the respondents of Phase I (see Table 2). Phase II contacts were limited to those respondents who had returned Phase I.

Table 2.--Sample contacts and participation: Delphi II.

Group	Participants Contacted	Actual Participation	Percent Participation
I. Quebec	26	21	80.77%
II. Canada	18	15	88.33%
III. U.S.A.	24	19	79.19%
IV. Overseas	6	2+4[a]	33.33%[a]
Total	74	57	77.03%[a]

[a] When using the Tukey post hoc analysis with ANOVA, the data of Delphi I and II were used in order to obtain pairwise differences (see p. 34).

Of the 74 questionnaires sent in Phase II, 56 experts, or 75.68%, completed the Delphi II Questionnaire in time for the computer analysis. Seven months were spent in collecting the data included.

The 56 respondents to both rounds in Delphi I and II represent 66.66% of the participants originally contacted. The result was that 74 persons contributed to the information gathered in the study.

Nature of the Research Instrument

The study was conducted within the general category of survey research. Surveys may be used for studying relationships, longitudinal changes, or for noting contrasts and similarities between groups. Methods such as questionnaires and interviews are commonly used to gather survey information.

The Delphi Technique

The Delphi method has been described by Vande Ven and Delbecq[2] as a replacement for face-to-face information-gathering techniques such as general survey methods for the development of more impersonal group decision procedures. Indeed, the Delphi technique is a method of eliciting opinions from a panel of experts with the objective of generating group consensus responses but conducted through questionnaires interspersed with feedback.

Each authority was expected to take a position on each statement. The central thrust of these positions as indicated by mean score and standard deviation was communicated to the other participants.

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[2] A. Vande Ven and A. L. Delbecq. "Nominal Versus Interacting Group Processes for Committee Decision-Making Effectiveness," Academy of Management Journal 14,2 (1971): 203-12.

Dalkey stated that the Delphi technique "represents one of the most promising efforts to eliminate personal factors (other than knowledge) from group problem-solving."[3] Hall[4] estimated that many decisions made by separated individuals are superior to those made by face-to-face groups.

Helmer[5] concluded that the Delphi "eliminates committee activity altogether, thus further reducing the influence of certain psychological factors, such as specious persuasion, the unwillingness to abandon publicly expressed opinions, and the bandwagon effect of majority opinion."

Weaver has identified what he terms the "Exploratory Delphi" and the "Normative Delphi."[6] The former is characterized (a) by estimates of what experts judge to be probable occurrences and (b) estimates of when experts foresee the occurrence happening. The "Normative Delphi" is characterized by estimates of what experts judge to be desirable occurrences.

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[3] N. C. Dalkey, "The Delphi Method: An Experimental Study of Group Opinion," Memorandum RM588-PR (Rand Corporation, June 1969).

[4] J. Hall, "Decisions, Decisions, Decisions," Psychology Today (November 1971): 51.

[5] O. Helmer, Social Technology (New York: Basic Books, 1966).

[6] T. W. Weaver, Delphi: A Critical Review, RR-7 (Syracuse, New York: Education Policy Research Centre, February 1972), pp. 1-3.

The Use of the Delphi in This Research

This study is primarily of the normative Delphi type, although some experts made comments which would be more characteristic of the exploratory Delphi.

The Delphi technique was chosen partially because of its predictive value, as concluded by Cyphers,[7] who found that Delphi information was usable for assisting in formulating the future targets in the field of education.

Weaver advises that "any consideration of the future of education should attempt to clarify what we can reasonably expect to make happen or not expect to make happen. Rather than focus on 'accuracy,' the focus might better be on 'plausibility' or reasonableness of forecasts."[8]

As the ends of this study relate primarily to a future Outdoor Education Teacher Preparation Curriculum at the *Université Laval*, experts in the study were requested to give answers which would emphasize "shouldness" as opposed to "is-ness."

In this study, the information gathered was that of responses of selected individual outdoor educational leaders from universities, colleges, public and private schools, organizations and agencies at the provincial/state or national level.

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[7] Vincent A. Cyphers, "A Study to Determine the Significant Outdoor Experiences for Elementary Teachers" (Ph.D. dissertation, Colorado State College of Education, 1961).

[8] Helmer, Social Technology.

The instrument used in gathering information and feedback included two questionnaires administered to the four groups chosen, representing the Province of Quebec (French-Canadians, Group I), Canada (Anglo-Canadians, Group II), the United States (Group III), and some countries overseas (France, England, Sweden, the Netherlands, Egypt, and Venezuela, Group IV). These forms (cf. Appendix C) invited experts to evaluate statements, suggest modifications, and express opinions concerning five basic components which were identified as elemental to EPA/OE. The basic elements were related to:

I. Definitions of EPA/OE
II. Objectives of EPA/OE
III. Social and Cultural Environment
IV. EPA/OE and Learning
V. EPA/OE and Teacher Education Curriculum

Pre-Phase I: Construction of the instrument.--A list of statements concerning five basic elements of a rationale in Outdoor Education was constructed from the researcher's basic assumptions and from the review of related French and English literature. The rationale statements were divided into five parts according to the five basic elements identified.

The instrument was then administered to a select sample (n=10) for refinement and to test the content validity through "the judgment of experts as to what should be emphasized in a course of study."[9]

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[9] R. L. Thorndike and E. Hagen, Measurement and Evaluation in Psychology and Education (New York: John Wiley and Sons, Inc., 1957), pp. 105, 112.

Then, the instrument was submitted to the examination of a specialist in language translation for refinements of the French and to assure the validity of comparison between the groups utilizing the bilingual instrument.

Some experts were asked to give their personal definitions of EPA/OE[10] and to elaborate on open-ended questions (Appendix B) concerning their fundamental philosophy of EPA/OE and Outdoor Education Teacher Curriculum. The areas covered included:

1. the learner
2. the educator
3. community (physical, cultural, social)
4. school/teacher's school
5. learning theories for the outdoors

The four questions were as follows. What should be

1. your guiding principles?
2. the important criteria to be considered?
3. the determining factors? and
4. the operational steps of your approach?

These questions were asked to explore, in an informal way, the expert's opinion concerning a rationale of EPA/OE and Outdoor Education Teacher Curriculum in Pre-Phase I. The same questions were asked of 25 Quebec participants during interviews of one to five hours duration. Interviews were conducted because of the Canadian mail strike, which took place during the data-collection period. The opportunity was taken to explore the background of each respondent in EPA/OE. Many comments were recorded on tape. This process covered a two-month period. These recordings, personal definitions (Appendix A2) and interview questions were used as references in the data interpretation of Phases I and II of the study.

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[10] See Appendix A2.

Phase I: Delphi Questionnaire I.--The application of the experts' judgment to the 97 rationale statements contained in the original list of elements divided as follows constituted the activity for Phase I:

Part I. In your view, "Education Plein-Air"/Outdoor Education should be defined as.... (33 statements)

Part II. In your view, what should be the general objectives (educational and pedagogical) of "Education Plein-Air"/Outdoor Education? (17 statements).

Part III. Do you agree with the following statements concerning the development of the cultural and social values of society? (11 statements)

Part IV. Do you agree with the following statements concerning the future development of "Education Plein-Air"/ Outdoor Education and learning? (13 statements)

Part V: Do you agree with the following statements concerning the future development of "Education Plein-Air"/ Outdoor Education and Teacher Education and Curriculum? (13 statements)

Each rationale statement of the elements identified was rated by each expert according to the following scale:

SA: the expert "strongly agrees" with the statement,

A: the expert "agrees" with the statement,

N: the expert is "neutral " or "undecided,"

D: the expert "disagrees" with the statement, and

SD: the expert "strongly disagrees" with the statement.

In a space provided on the form, it was possible for the expert to modify the wording or the meaning of each statement, or add other statements if judged appropriate.

The 25 pages of the Phase I form (cf. Appendix C) were accompanied by a cover letter (cf. Appendix D) explaining the intent of the questionnaire and giving direction on how to proceed through the questionnaire.

Responses to the Phase I Questionnaire were analyzed for the mean $(\overline{X})$[11] and standard deviation (σ)[12] computed for each statement. These data were noted on the Delphi II Questionnaire as a form of feedback inherent in the Delphi technique (see Appendix B).

In light of the group consensus given (as expressed by the $\overline{X}$ and σ in Appendix C), experts were asked to re-evaluate the statements, and, if necessary, reconsider their original position in an effort to

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[11] The formula for determining the mean was as follows:

$$\overline{X} = \frac{x_1 + x_2 + \dots x_n}{N} .$$

Taken from M. J. Slakter, Statistical Inference for Educational Researchers (Mass.: Addison-Wesley Publishing Co., 1972), pp. 35-40.

[12] Standard deviations were calculated using the formula derived from Slakter, Statistical Inference, p. 145:

$$\sigma = \frac{\Sigma X^2 - \frac{(\Sigma X)^2}{N}}{N} .$$

tighten the consensus. Due to respondents' comments and/or extremely high standard deviation, certain statements were deleted, some slightly modified, and some added (cf. Appendices B and C). Responses were expected to fall within the group consensus determined by the means ($\bar{X}$), standard deviations (σ), and modes (m) in the first questionnaire. If, however, the expert was not able to subscribe to the given consensus, he was to indicate his opinion by marking a response on the scale, and indicating his reasons for deviating from the norm.

Phase II: Delphi Questionnaire II.--The Phase II instrument was a composite of the statements and modifications gathered from Phase I. It was accompanied by a cover letter (cf. Appendix D), which explained the objectives of the questionnaire and gave several directions on how to proceed through Delphi II (cf. Appendix B for Delphi II).

The objective of this questionnaire was to determine experts' reactions to the same rationale statements after they had had the opportunity to review the feedback received from the other experts in the field of Outdoor Education.

Responses to the initial Delphi questionnaire were reviewed, analyzed, and the mean ($\bar{X}$) and standard deviation (σ) computed for each rationale statement. These data were noted on the Delphi Questionnaire II.

Each respondent was offered the opportunity to modify his position. In cases where his responses to an item differed from the consensus indicated by the mean ($\overline{X}$) and standard deviation (σ), he was asked to give specific, written reasons for his departure from the central range of the total group response.

Analysis of Data

The Delphi I and II questionnaire results served as the information base for the study. Data were analyzed through a one-way analysis of variance (ANOVA)[13] to compare the four groups of experts' (Quebec, Group I; Canada, Group II; the United States, Group III; and overseas, Group IV) responses to each statement.

The data were analyzed according to the design shown in Chart 1.

	Phase I				Phase II		
	Part I	Part II	...	Part V	Part I	Part II	...V
	Q1..Qn	Q1..Qn		Q1..Qn	Q1..Qn	Q1..Qn	
Group I Quebec							
Group II Canada							
Group III U.S.A.							
Group IV Overseas							

Chart 1.--One-way analysis of variance by group.

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[13] Slakter, *Statistical Inference*, pp. 312 sq.

A Tukey post hoc analysis[14] was included to explore specific pairwise differences between groups of experts. The comparison between group results was done as shown in Chart 2.

Group				
I	▨	I II	I III	I IV
II	▨	▨	II III	II IV
III	▨	▨	▨	III IV
IV	▨	▨	▨	▨

Chart 2.--Tukey post hoc analysic by group.

Also, an analysis of the mean ($\bar{X}$) and standard deviation (σ) of each statement was done for each group as shown in Chart 3.

In this study, a graphic method[15] was used for isolating high consensus and high opinion strength items where there was a great diversity of opinion among the respondents. This technique provides a method for classifying items on degree of consensus and opinion strength.

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[14] R. E. Kirk, Experimental Design Procedure for Behavioural Sciences (Belmont, California: Brooks/Cole Publishing Company, 1968), pp. 88-90, 531-32.

[15] As suggested by Bob Wilson, Office of Research Consultation (ORC), Michigan State University (article in preparation), July 1976.

	Statement Number								
Subject	Stmt.1	Stmt.2	Stmt.3	....	....	....	....	....	Stmt.97
S1									
S2									
S3									
.									
.									
Sn									
	$\bar{X}_1$	$\bar{X}_2$	$\bar{X}_3$	....	....	....	....	....	$\bar{X}_{97}$
	σ_1	σ_2	σ_3	....	....	....	....	....	σ_{97}

Chart 3.--Means and standard deviations of group X responses.

Basic Method

The instrument was developed with the 97 statements evaluated by the respondents of each group (Group I, Quebec, Group II, Canada; Group III, U.S.A.; Group IV, overseas). The statements of both phases of the Delphi were scaled in a Likert-type method;[16] i.e., 5 = the respondent strongly agrees (SA), 4 = the respondent agrees (A), 3 = the respondent is neutral, undecided (N), 2 = the respondent disagrees (D), and 1 = the respondent strongly disagrees (SD).

First, Tables 3,5,7,9,11 were used as response matrices for statement means (stmt. $X = \frac{X_1 + X_2 \ldots X_n}{N}$) and statement standard deviations

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[16] Ibid.

$\frac{\left(\Sigma X^2 - \frac{(\Sigma X)^2}{N} \right).}{N}$ Then, the range of statement standard deviation was marked off the vertical axis on a bivariate grid. On the horizontal axis, the five-point scale from strong agreement to strong disagreement was recorded. Thus, each statment was plotted on the grid at the intersection of the mean ($\bar{X}$) on the horizontal axis and the standard deviation (σ) on the vertical axis in order to display the degree of consensus among respondents and the mean response strength.

Finally, each axis was partitioned into three equal sectors, (a) on the horizontal axis for means illustrating the consensus among respondents (high, moderate, or low consensus), and (b) on the vertical axis for standard deviation, revealing the response strength (strong disagreement, moderate opinion, and strong agreement ratings; see Chart 4).

Summary

The questionnaires served as the information base for the study. Data gathered from ANOVA, and a Tukey post hoc analysis have been expressed in the following categories: adjusted frequency of response (percent), mean responses ($\bar{X}$), and distribution responses (σ) for each rationale statement in the five elements of EPA/OE under investigation: definitions (33 statements), objectives (17 statements), social and cultural environment (11 statements), learning processes (13 statements), and professional preparation (13 statements).

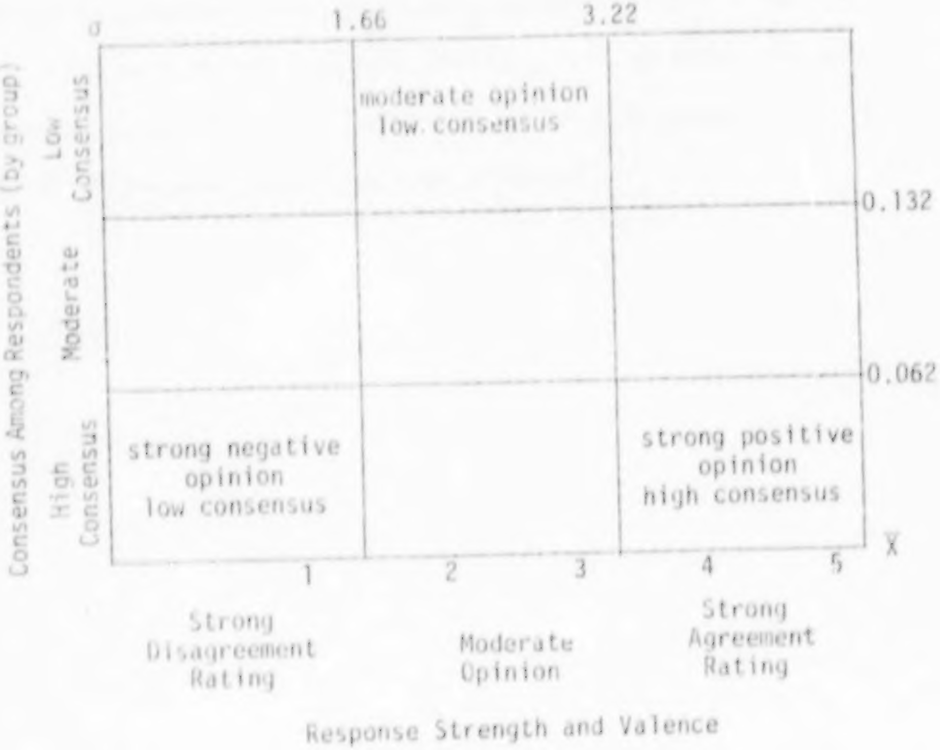
σ
1.66
3.22
moderate opinion
low consensus
0.132
0.062
strong negative
opinion
low consensus
strong positive
opinion
high consensus
X̄
1
2
3
4
5
Consensus Among Respondents (by group)
Low
Consensus
Moderate
High
Consensus
Strong
Disagreement
Rating
Moderate
Opinion
Strong
Agreement
Rating
Response Strength and Valence

Chart 4.--Consensus and response strength among respondents within each group.

The analysis compared four groups of experts (I, Quebec; II, Canada; III, U.S.A.; and IV, overseas) on a set of 97 rationale statements identified from the researcher's assumptions and from French-Canadian and American literature.

A weighted scale was applied to Phase I data as follows:

	Scale
SA: The expert strongly agrees with the statement	5
A: The expert agrees with the statement	4
N: The expert is neutral or undecided	3
D: The expert disagrees with the statement	2
SD: The expert strongly disagrees with the statement	1

Means, standard deviations, and modes were computed and indicated in Phase II questionnaires as dictated by each group's consensus.

The analysis of data also combined both an ANOVA for each rationale statement and a Tukey post hoc for each group, to explore pairwise differences between groups of experts.

CHAPTER IV

ANALYSIS OF RESULTS

Introduction

The purpose of this study was to explore the Outdoor Education movement as perceived by selected Outdoor Education leaders and experts in Quebec, Canada, the United States, and overseas in order to draw inferences and recommendations for an Outdoor Education teacher training curriculum at Laval University, Quebec.

The analysis of results is a display of information gathered from each step of the study. The data have both statistical and non-statistical elements. Statistical information was gathered from frequency counts and organized into ranges and medians. Non-statistical data consisted of modifications and suggestions made by participants on each questionnaire. These comments have been grouped by rationale statement and organized to assist in their comprehension. Comments were further studied for patterns of opinion in support or opposition to the elements of the rationale. These modifications from participants appear in Appendix C.

The review of literature provided information that led to the forming of 83 suggested rationale statements for EPA/OE. The initial stage of the research questionnaire was designed to sharpen and clarify the problem of which rationale statements should be explored within the study (Pre-Phase I). Suggested statements were grouped (Delphi I) in the categories of "Definitions," "Objectives," "Social and Cultural Environments," "EPA/OE and Learning," and "Outdoor Education Teacher Curriculum."

The statements developed appear in Appendix B (Delphi I). The results (means [$\bar{X}$] and standard deviations [σ]) of the first round (Phase I) were recorded on the Delphi Questionnaire II along with a few modifications (Appendix B). The statements as developed and modified (Phase II) appear in Tables 3, 5, 7, 9, and 11, along with a summary of participants' response patterns expressed through the adjusted frequency (percent), the mean ($\bar{X}$), and standard deviation (σ). The complete listing of participant modifications may be found in Appendix A2.

Following the receipt of information from the initial contact with participants, there were several changes made in the original statements (6 deleted, 14 added, 26 slightly altered or reworded; see Appendix C for modifications). Note that all the 97 statements of Phase II met with a high level of acceptance from participants.

An ANOVA with a post hoc analysis showed statistically significant differences at a .05 level among groups within each of the five parts of the Delphi II questionnaire.

Presentation of Results

ANOVA

The first part of the analysis of results (ANOVA) presents an overview of the responses of Delphi II, which are laid out in the following categories: adjusted frequency of response (percent), mean responses ($\bar{X}$), and standard deviation (σ) for each rationale element (see Tables 3, 5, 7, 9, and 11).

Tukey Post Hoc Analysis

Next, a Tukey post hoc analysis was undertaken for the results of Delphi II, in order to show the major differences between groups. The analysis was done with .05 or less level of significance. The results are expressed by part.

The results of the analysis are expressed in two decimals. The third decimal was rounded up, except for the levels of significance.

For the rationale search, results have been organized by group (I, II, III, IV) and by the five parts corresponding to the original fundamental questions:

1. How should EPA/OE be defined?
2. What objectives should EPA/OE seek to attain?
3. What type of social and cultural environments relate to EPA/OE?
4. What are some of the learning assumptions and implications of EPA/OE?
5. What competencies should the leaders possess in order to achieve the objectives of EPA/OE?

Part I: Definition of EPA/OE

One of the most important aspects of this inquiry was the exploration of the nature of EPA/OE as expressed in the instrument as it relates to school curriculum and leadership training in EPA/OE.

Commentary on the results which showed a statistically significant difference in group response patterns follows.

The first part, concerning the definition of EPA/OE, revealed some major differences in experts' and leaders' reactions to the rationale statements of Delphi II. Also, statistically significant differences appeared in the Tukey post hoc analysis for 12 of the 32 statements included in the instrument (Statements 3, 8, 16, 17, 23, 24, 25, 26, 28, 29, 30, and 31).

An ANOVA with a Tukey post hoc analysis (HSD) was undertaken for each of the 33 statements of Part I, regarding "Definitions of EPA/OE." The analysis demonstrated the following statements as having a significant difference of .05 or less: Statements 3, 5, 8, 12, 23, 24, 25, 26, 27, 28, and 30 (see Table 4, p. 66). The results of these analyses follow.

Statement 3: Learning through the outdoors.

L'apprentissage par le Plein-Air.

There is a significant difference at the .03 level between the Quebec ($\bar{X}$=4.53; σ=.51) and U.S.A. ($\bar{X}$=3.75; σ=.77) groups (cf. Table 4).

Indeed, Quebec appeared to be significantly different from the U.S.A. as related to the definition of Outdoor Education, Table 3.--Adjusted frequency (%), means ($\bar{X}$), and standard deviations (σ) of responses concerning definitions of EPA/OE (Statements 1-33) (Delphi II).

Statement	Group[a]	Adjusted Frequency (%) SA	A	N	D	SD	Mean $\bar{X}$	Std. Dev. σ
1. Learning in the Outdoors. *L'apprentissage dans le Plein-Air.*	I	19	75	0	0	6	4.00	0.87
	II	27	46	9	19	0	3.86	0.95
	III	14	64	14	7	0	3.94	0.77
	IV	50	50	0	0	0	4.25	0.50
2. Learning for the Outdoors. *L'apprentissage pour le Plein-Air.*	I	13	40	7	13	13	3.19	1.33
	II	18	36	18	0	0	3.50	1.02
	III	14	64	21	0	0	3.88	0.62
	IV	50	0	0	50	0	4.00	1.41
3. Learning through the Outdoors. *L'apprentissage par le Plein-Air.*	I	50	50	0	0	0	4.53	0.51
	II	27	56	9	9	0	4.07	0.83
	III	14	57	21	7	0	3.75	0.77
	IV	50	0	0	50	0	3.75	1.26
4. Learning about the Outdoors. *L'apprentissage au sujet du Plein-Air.*	I	0	47	20	20	13	3.06	1.12
	II	0	56	27	18	0	3.50	0.76
	III	7	57	21	14	0	3.56	0.81
	IV	50	0	0	50	0	4.00	1.41
5. Learning in and for the Outdoors. *L'apprentissage dans et pour le Plein-Air.*	I	13	38	25	6	19	3.24	1.30
	II	27	56	9	9	0	4.14	0.86
	III	43	29	21	7	0	4.00	0.97
	IV	50	0	50	0	0	4.25	1.50
6. Learning in, for, through and about the Outdoors. *Apprentissage dans, pour, par et au sujet du Plein-Air.*	I	19	44	19	12	0	3.68	0.99
	II	54	39	8	0	0	4.50	0.63
	III	53	33	7	7	0	4.24	0.90
	IV	50	50	0	0	0	4.60	0.55
7. Curriculum supplement that facilitates and enhances learning/teaching. *Une méthode d'enseignement qui facilite et enrichit l'apprentissage.*	I	17	56	11	11	6	3.68	0.99
	II	38	62	0	0	0	4.50	0.63
	III	33	53	13	0	0	4.24	0.90
	IV	0	0	100	0	0	4.60	0.55
8. Learning process that cuts across the school curriculum offerings, through physical education, natural sciences, social sciences and many other subject matters. ***Un processus d'apprentissage qui fait appel aux matières du curriculum telles que l'éducation physique, les sciences naturelles, les sciences sociales et plusieurs autres matières.***	I	6	67	6	22	0	3.58	0.90
	II	54	46	0	0	0	4.50	0.52
	III	53	33	13	0	0	4.29	0.92
	IV	100	0	0	0	0	4.60	0.55
9. Education in the outdoors as a means of sharpening and deepening most children's learning. *Une éducation dans le Plein-Air comme moyen d'aviver et d'approfondir l'apprentissage de la plupart des enfants.*	I	22	72	0	6	0	4.11	0.66
	II	33	50	8	8	0	4.07	0.79
	III	40	40	13	7	0	4.12	0.86
	IV	50	50	0	0	0	4.00	1.22

Table 3.--Continued.

Statement	Group	Adjusted Frequency (%) SA	A	N	D	SD	Mean $\bar{X}$	Std. Dev. σ
10. As those experiences that involve enjoying, interpreting, and wisely using the natural environment in achieving at least in part, the objectives of education. *Comme des expériences qui impliquent l'appréciation, l'interprétation et l'utilisation intelligente de l'environnement dans l'atteinte, du moins en partie, des objectifs de l'éducation.*	I	18	77	6	0	0	4.11	0.47
	II	31	69	0	0	0	4.31	0.48
	III	40	47	7	7	0	4.12	0.86
	IV	50	0	50	0	0	3.40	1.14
11. Any physical or recreational activity that actively brings the learner and the natural environment in close contact providing a deeper understanding and appreciation of the natural environment. *Toute activité physique ou récréative qui met celui qui apprend et l'environnement naturel en rapport étroit en lui fournissant une meilleure compréhension et appréciation de l'environnement naturel.*	I	22	72	0	6	0	4.11	0.66
	II	8	62	15	15	0	3.56	0.96
	III	13	40	40	7	0	3.47	0.87
	IV	50	50	0	0	0	4.00	1.22
12. Any activity of structured or non-structured leisure by which an individual gets in contact with elements of nature. *Toute activité de loisir "structurée" ou "non-structurée" par laquelle un individu prend contact avec les éléments de la nature.*	I	0	72	22	6	0	3.68	0.58
	II	15	31	31	23	0	3.94	1.09
	III	0	50	0	50	0	3.40	0.89
13. Any activity with ecological concerns allowing the individual to discover, identify and analyze the natural environment, its constituent elements and interrelating elements with a conservation purpose. *Toute activité à caractère écologique permettant à l'individu de découvrir, d'identifier et d'analyser l'environnement, les éléments qui le constituent et les éléments d'interrelation, et ce, avec un but de conservation.*	I	11	44	22	22	0	3.37	1.01
	II	8	62	15	15	0	3.63	0.81
	III	13	27	40	20	0	3.38	0.96
	IV	50	0	50	0	0	4.00	1.41
14. Physical activities in which the individual, through sports,* gets in direct contact with the natural environment. *Activités physiques dans lesquelles l'individu, par les sports,* prend contact direct avec l'environnement naturel.*	I	12	6	6	47	29	2.22	1.26
	II	8	15	46	23	8	2.81	1.05
	III	0	13	27	27	33	2.24	1.03
	IV	0	50	0	50	0	3.00	1.41

Table 3.--Continued.

Statement	Group	Adjusted Frequency (%)					Mean	Std. Dev.
		SA	A	N	D	SD	$\bar{X}$	σ
15. **Curriculum implementation through direct experiences outside the classroom.** *Implantation du curriculum à travers des expériences directes en dehors de la classe.*	I	6	47	24	24	0	3.39	0.92
	II	33	50	17	0	0	4.07	0.88
	III	40	40	13	7	0	4.00	0.79
	IV	50	50	0	0	0	3.60	1.14
Learning process offering opportunities for direct experiences in the acquisition of:								
16. a. Sound concepts and knowledge concerning human and natural resources.	I	28	72	0	0	0	4.26	0.45
	II	31	62	8	0	0	4.19	0.54
	III	43	50	7	0	0	4.31	0.60
	IV	50	50	0	0	0	3.50	1.73
17. b. Lifetime skills permitting a creative and refreshing way of living.	I	39	56	0	6	0	4.26	0.73
	II	46	46	8	0	0	4.38	0.62
	III	50	50	0	0	0	4.44	0.51
	IV	100	0	0	0	0	3.51	1.73
18. c. Positive attitudes reflecting harmony of man with nature.	I	61	33	0	6	0	4.48	0.77
	II	42	50	8	0	0	4.33	0.61
	III	53	47	0	0	0	4.47	0.51
	IV	100	0	0	0	0	4.25	1.50
Un processus d'apprentissage offrant des opportunités pour des expériences directes en vue de l'acquisition de: *a. Concepts et connaissances fondamentales concernant les ressources humaines et naturelles.* *b. Habilités durables permettant une façon de vivre créatrice et enrichissante.* *c. Attitudes positives manifestant une relation harmonieuse de l'homme avec la nature.*								
19. **(As one part of outdoor education), outdoor experiences concerning the sciences of conservation and ecology.** *(Comme une partie de l'Éducation Plein-Air), les expériences de Plein-Air traitant des sciences de la conservation et l'écologie.*	I	11	61	22	6	0	3.79	0.71
	II	23	54	15	0	8	4.00	1.03
	III	33	60	0	7	0	4.18	0.73
	IV	100	0	0	0	0	3.75	1.89

Table 3.--Continued.

	Statement	Group	Adjusted Frequency (%) SA	A	N	D	SD	Mean $\bar{X}$	Std. Dev. σ
20.	**Generic term for any educational program with focus upon natural environment and man's interaction with and in it.** *Un terme générique pour tout programme éducationnel mettant l'accent sur l'environnement naturel et l'interaction de l'homme avec et dans celui-ci.*	I	20	50	22	6	0	3.89	0.81
		II	8	46	31	15	0	3.44	0.81
		III	20	53	7	20	0	3.59	1.06
		IV	50	0	50	0	0	3.40	1.14
21.	**Direct approach to exploration and learning which expedites maximum utilization of the natural physical environment as a learning laboratory which is living and unique.** *Une approche directe pour l'exploration et l'apprentissage qui active l'utilisation maximumde l'environnement physique, naturel comme un laboratoire d'apprentissage unique et vivant.*	I	44	50	0	6	0	4.32	0.75
		II	15	69	8	8	0	3.94	0.68
		III	47	47	7	0	0	4.35	0.61
		IV	50	50	0	0	0	3.40	1.52
22.	**Physical activities held in the out-of-doors but with health* concerns as the primary goal.** *Activités physiques dans le Plein-Air orientées vers des préoccupations de santé physique, comme premier but.*	I	6	6	6	50	33	2.11	1.15
		II	0	15	31	23	31	2.19	1.05
		III	0	7	13	53	27	1.94	0.83
		IV	0	0	50	50	0	2.40	0.99
	Outdoor Education is a subject matter oriented toward: (uni-disciplinary approach with specific content other than history and principles of Outdoor Education)								
23.	**a. Elementary (grade 1 to 6).**	I	6	6	0	44	44	1.84	1.07
		II	25	0	8	8	58	2.07	1.67
		III	0	0	7	40	53	1.53	0.62
		IV	50	0	50	0	0	4.00	0.71
24.	**b. Secondary (grade 7 to 12)**	I	0	18	0	47	35	2.00	1.03
		II	8	8	8	17	58	1.80	1.26
		III	0	0	7	40	53	1.53	0.62
		IV	50	0	50	0	0	4.00	0.71
25.	**c. College level.**	I	6	12	0	47	35	2.06	1.16
		II	8	8	8	17	58	1.93	1.39
		III	0	0	7	40	53	1.53	0.62
		IV	50	50	0	0	0	4.20	0.43
26.	**d. Adult education.**	I	6	12	0	47	35	2.06	1.16
		II	0	8	17	17	58	1.80	1.15
		III	10	0	7	40	53	1.53	0.62
		IV	50	50	0	0	0	4.20	0.45
	L'Éducation Plein-Air est considérée comme une matière au niveau: (approche uni-disciplinaire avec contenu spécifique autre que histoire, principes de l'Éducation Plein-Air) *a. Élémentaire.* *b. secondaire.* *c. C.E.G.E.P.* *d. Éducation permanente.*								

Table 3.--Continued.

Statement	Group	Adjusted Frequency (%) SA	A	N	D	SD	Mean X̄	Std. Dev. σ
Outdoor Education is a multi-disciplinary learning process oriented toward:								
27. a. Elementary (grade 1 to 6).	I	61	39	0	0	0	4.48	0.51
	II	85	15	0	0	0	4.87	0.34
	III	53	47	0	0	0	4.47	0.51
	IV	50	50	0	0	0	4.20	0.84
28. b. Secondary (grade 7 to 12).	I	41	59	0	0	0	4.39	0.50
	II	85	15	0	0	0	4.87	0.34
	III	53	47	0	0	0	4.47	0.51
	IV	50	50	0	0	0	4.20	0.84
29. c. College level.	I	13	81	6	0	0	4.06	0.43
	II	47	53	0	0	0	4.41	0.51
	III	47	53	0	0	0	4.41	0.51
	IV	50	50	0	0	0	4.20	0.84
30. d. Adult education.	I	6	69	19	6	0	3.76	0.66
	II	61	31	8	0	0	4.44	0.63
	III	47	53	0	0	0	4.41	0.51
	IV	50	50	0	0	0	4.20	0.84
L'éducation Plein-Air est un processus d'apprentissage multi-disciplinaire, au niveau: *a. élémentaire.* *b. secondaire.* *c. C.E.G.E.P.* *d. éducation permanente.*								
31. As a means of curriculum enrichment, in a setting that enhances learning and provides for direct experiences and the opportunity for solving real-life problems. It cuts across the subject matter areas and is best used by the teacher as a planned part of the learning process.	I	44	50	6	0	0	4.42	0.61
Comme un moyen d'enrichissement du curriculum, dans un milieu qui approfondit l'apprentissage et prévoit des expériences directes et aussi l'opportunité de résoudre des problèmes concrets de la vie. Elle entrecoupe toutes les matières et est mieux utilisée par les professeurs comme une partie planifiée du processus d'apprentissage.	II	92	8	0	0	0	4.81	0.40
	III	47	53	0	0	0	4.35	0.61
	IV	50	50	0	0	0	4.20	0.84

Table 3.--Continued.

Statement	Group	Adjusted Frequency (%)					Mean	Std. Dev.
		SA	A	N	D	SD	$\bar{X}$	σ
32. (Starting from the basis of "CURRICULUM," as that which happened to a child or learner as opposed to subject matter or content taught),-as a means to implement the curriculum in a way determined by the appropriate content of the moment when and where it provides the best fit for the child's needs and interests. *(Partant sur la base du "CURRICULUM," tel que ce qui s'est passé chez celui qui apprend ou l'enfant par opposition à la matière ou contenu enseigné),- un moyen de mettre en pratique le curriculum, déterminé d'une certaine façon par un contenu adéquat, du moment ou et quand cela convient le mieux pour les intérêts et besoins de l'enfant.*	I	11	56	22	11	0	3.63	0.83
	II	33	50	17	0	0	4.31	0.79
	III	33	0	27	0	0	4.00	0.79
	IV	50	0	50	0	0	3.80	1.09
33. Educational process coming from a series of organized activities being held generally in a natural or semi-natural setting, based on the potential offered by the natural setting and contributing to the physical and psychic development of the individual, increasing his level of awareness of his inter-relations with nature, and also capable of modifying his attitudes and behavior toward the natural environment. *Un processus éducatif dérivant d'un ensemble d'activités organisées se déroulant dans la nature* basées sur l'exploitation du potentiel offert par le milieu naturel et contribuant au développement de l'individu tant sur le plan physique que psychique, tout en accroissant son degré de conscience de ses inter-relations avec la nature, et susceptibles de modifier ses attitudes et comportements vis-à-vis du milieu naturel.*	I	17	79	6	0	0	4.11	0.46
	II	33	42	8	17	0	3.80	1.08
	III	20	73	7	0	0	4.06	0.56
	IV	50	50	0	0	0	4.00	1.22

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[a] Group I = Quebec, Group II = Canada, Group III = U.S.A., Group IV = overseas.

"learning through the outdoors" in Phase II. The consensus level for the Quebec group was .51.

In the comparison of Delphi I and Delphi II, a significant difference appears between Canadians and Europeans at a level of .010.

An American commented (Appendix A, question 3) in these terms to the concept of learning through the outdoors: "If we are talking methodology only, which I am not (D)."[1]

One of the Quebec experts mentioned his conditional approval in saying that the individual should be placed in "*un milieu authentiquement naturel et non seulement en dehors de la classe*" in order to be effective.

Additional comments pertaining to Statement 3:[2]

QUEBEC

II:17 *Définition partielle.*

U.S.A.

I:23 Partial.

Statement 5: Learning in and for the outdoors.
L'apprentissage dans et pour le Plein-Air.

On Julian Smith's definition, the reaction of experts was as follows: The Quebec group's opinions tended to be diverse, with a very heterogeneous consensus as expressed by a standard deviation of 1.30

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[1] (D) = disagree.

[2] Comments made by experts have been assigned the following taxonomy: The first numeral (Roman numeral) indicates the phase of the Delphi in which it was made, Phase I or II; the second number refers to the expert who made the comment.

and a mean of 3.24; indeed, 38% of the Quebec respondents were undecided or neutral concerning such a definition of EPA/OE. The other groups agreed with an $\overline{X}$ of 4.00 or above, with a distribution of ±1.00 or less, excepting the overseas group ($\sigma=1.50$).

Additional comments pertaining to Statement 5:

QUEBEC

II:17 *Définition partielle.*

II:12 *Deux concepts?*

II:10 *Traduction de "Outdoor" par le "Plein-Air"?*

CANADA

I:8 Children can learn in the outdoors but at the time they are there, their learning might be directed toward another objective.

U.S.A.

I:23 Partial.

Statement 8: Learning process that cuts across the school curriculum offerings, through physical education, natural sciences, social science and many other subject matters.

Un processus d'apprentissage qui fait appel aux matières du curriculum telles que l'éducation physique, les sciences sociales et plusieurs autres matières.

The results evinced a significant difference at the .004 level among the four groups concerning statement 8. But, the Canadian and overseas groups had the tightest consensus $\sigma=.52$ ($\overline{X}=4.5$) and $\sigma=.55$ ($\overline{X}=4.60$).

In Delphi I there was a significant difference between the Quebec group ($\overline{X}=3.60$; $\sigma=1.29$) and the U.S.A. group ($\overline{X}=4.50$; $\sigma=.88$).

There was a significant difference at a level of .001 between Delphi I and II in the Quebec group ($\bar{X}$=.94; σ=1.30) and the other three groups: Canada, $\bar{X}$=-.29, σ=1.54; U.S.A., $\bar{X}$=-.81, σ=.83,; and overseas, X=-1.00, σ=1.41.

A Quebec expert explained this in the following terms:

> *Le Plein-Air n'est pas seulement un instrument pour enricher les procédés educatifs (processus l'apprentissage) mais également "but" en ce sens que l'éducation Plein-Air doit absorber le développement d'attitudes, d'appréciations, d'habilités dont l'individu aura besoin pour trouver satisfaction dans le Plein-Air* (I:17; Appendix A1).

Another expert mentioned that "*le Plein Air a sa propre valeur, les autre matières s'y rattachent!*" (I:16; Appendix A1).

Additional comments pertaining to Statement 8:

QUEBEC

I:27 *L'environnement naturel comme un "contenant" plus qu'un "contenu" par lequel on peut réaliser differents objectifs.*

I:18 *Spécialement en contexte scolaire élémentaire.*

I:17 *Le Plein-Air n'est pas seulement un instrument pour enricher les procédés éducatifs (processus d'apprentissage) mais est également "but" en ce sens que l'éducation Plein-Air doit absorber le développement d'attitudes, d'appréciation d'habilités dont l'individu aura besoin pour trouver satisfaction dans le Plein-Air.*

I;9 *Processus d'apprentissage pour fait appel aux matières.*

I:6 *Un processus d'apprentissage auquel peuvent se rattacher toutes les matières du curriculum. N.B. Le Plein-Air a sa propre valeur; les autres matières s'y rattachent.*

I:18 *Spécialement en contexte scolaire élémentaire.*

I:7 *Peut être une division à part.*

I:5 *Je suis favorable à l'intégration par le Plein-Air.*

II:17 *Définition partielle.*

II:5 *Pour moi, c'est plus que cela, c'est plus q'une matière académique, c'est un façon de vivre.*

II:3 *Curriculum...afin de mieux comprendre les lois de la nature et dans la but consiste à apprendre à vivre en harmonie avec son environnement.*

CANADA

I:17 Cut across the disciplines of the school curriculum reinforcing and integrating the various subject areas.

I:11 But not restricted to school curriculum.

I:4 I like this one. It is a process.

Statement 12: Any activity of structured or non-structured leisure by which an individual gets in contact with elements of nature.

Toute activité de loisir "structurée" or "non-structurée" par laquelle un individu prend contact avec les éléments de la nature.

The results made apparent significant differences between the U.S.A. group ($\bar{X}=2.24$; $\sigma=.75$) and the three other groups: overseas ($\bar{X}=3.40$; $\sigma=.89$), Canada ($\bar{X}=3.44$; $\sigma=1.09$), and Quebec ($\bar{X}=3.68$; $\sigma=0.58$) at a level of significance of .000. Of the Quebec respondents, 72% agreed, 22% remained undecided, and 6% disagreed with the expression of Statement 12.

Additional comments pertaining to Statement 12:

QUEBEC

I:27 *Pourrait être la définition de "Récréation de Plein-Air."*

I:21 *Le contact n'implique pas l'utilization rationelle des éléments de la nature.*

I:18 *L'acte Plein-Air implique une relation du "s'éduquant" avec le milieu naturel dans lequel il est momentainément émergé par l'intermediare d'une activité physique quelconque.*

I:11 *D'accord, mais il n'y pas que des activités de loisirs.*

II:12 *Définition partielle.*

II:3 *Toute activité structurée ou non-structurée: scolaire et para-scolaire.*

CANADA

I:7 But this must be in sympathy with the principle of wise use, without abuse or mis-use, not just contact.

I:4 Part only. Leisure oriented.

II:16 *Certains contacts sont éducation, d'autres ne le sont pas. Certains contacts ont des effets négatif sur l'environnement ex. ski alpin, moto-neige, etc.*

U.S.A.

I:15 Many activities are destructive to environment and build bad attitudes.

I:11 Partially.

II:15 Some contacts may be mis-educative.

II:9 The term "leisure" should be changed to recreation.

OVERSEAS

I:2 The benefit is not automatic for 100% of children (A).

Statement 23: Outdoor Education is a subject matter oriented toward (uni-disciplinary approach with specific content other than history and principles of Outdoor Education) as opposed to multi-disciplinary[3]

L'éducation Plein-Air est considérée comme une matière au niveau: (approche uni-disciplinaire avec contenu spécifique autre que histoire, principes de l'éducation Plein-Air)

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[3] See Table 3, p. 48.

a. at the elementary level (Stmt. 23).
élémentaire.

This concept of subject matter is fundamental in the conception of Outdoor Education.

A level of significance of .001 (.007 in Delphi I) revealed, outwardly, a clear difference in the overseas group from the other three groups (U.S.A. $\bar{X}$=1.53, σ=0.62; Quebec $\bar{X}$=1.84, σ=1.07; and Canada $\bar{X}$=2.07, σ=1.62).

This result demonstrated evidence of the greatest disagreement and the tightest consensus in the American group concerning Outdoor Education as a subject matter, at least as far as the elementary grades are concerned.

b. at the secondary level (Stmt. 24).
secondaire.

The results presented here also show a significant difference at a level of .110 for the secondary grades between overseas ($\bar{X}$=4.0, σ=0.71) and the U.S.A. ($\bar{X}$=1.53, σ=0.62), Canada ($\bar{X}$=1.80, σ=1.26), and Quebec ($\bar{X}$=2.00, σ=1.03).

The American perception of Statement 24 seemed to be completely different from the others, with a fairly tight consensus (U.S.A. σ=0.62; overseas σ=0.71). However, Delphi II minus Delphi I registered a pairwise difference of 0.33 as expressed in the following subsets: overseas-Quebec, U.S.A.-Quebec, and U.S.A.-Canada.

c. college level (Stmt. 25).
C.E.G.E.P.

There is also a difference at .00 level for Statement 25 concerning the college level, as follows:

The overseas group ($\overline{X}$=4.20, σ=0.43) presented a significant difference from the American group ($\overline{X}$=1.53, σ=0.62), the Canadian group ($\overline{X}$=1.93, σ=1.39), and the Quebec group ($\overline{X}$=2.06, σ=1.16).

Indeed, the overseas group tends to agree strongly ($\overline{X}$=4.20) and firmly (σ=0.43) on the consideration of Outdoor Education as a subject matter at the college level.

In Phase I, Quebec and overseas were different (f=.039) from Canada and the U.S.A. However, in the overall analysis of Phase I and Phase II, there is a significant difference at the .049 level from overseas ($\overline{X}$=1.250, σ=.96), Quebec ($\overline{X}$=1.26, σ=1.63), and Canada ($\overline{X}$=1.33, σ=1.72).

d. adult education (Stmt. 26).
éducation permanente.

A difference at .00 is exhibited between overseas ($\overline{X}$=4.20 σ=0.45) and the U.S.A. ($\overline{X}$=1.53, σ=0.62), Canada ($\overline{X}$=1.80, σ=1.15), and Quebec ($\overline{X}$=2.06, σ=1.16).

The major differences appeared in Questions 23-26 because experts' opinions suggested an almost equal evaluation for all levels as expressed in the following comments:

Additional comments pertaining to Statements 23-26:

QUEBEC

I:25 *Pas une matière parmi tant d'autres, mais bien la méthode pour servir à l'apprentissage de toutes les autres matières.*

I:21 *Etant un moyen de formation facilitant "l'éduqué et l'éduquant" à cheminer ensemble dans l'atteinte des buts généraux de l'éducation.*

I:11 *Actuellement, cet énoncé ne s'applique pas au Québec, ses politiques du Ministère de l'Education du Québec (MEQ).*

I:8 *Réfère à la question 26 (DF) et 17 (DF) comme signifiant un état possible de la situation actuelle du Plein-Air au Québec.*

I:6 I disagree with the use of subject matter when applied to elementary or secondary.

I:5 *L'éducation Plein-Air, non, mais les activités dites "Plein-Air," oui.*

II:5 *Je crois que tout apprentissage devrait favoriser le vécu car la vie en plein nature devrait favoriser tous les apprentissages. C'est un milieu privilégié pour l'intégration des matières.*

CANADA

I:18 Change (a), (b), (c), (d) to all levels of learning.

I:13 Not my way at all (SD).

I:12 No, an approach, a service.

I:8 Outdoor Education's justification lies in being a unifier of curriculum of providing unique approach in education not merely another subject in the curriculum.

I:5 A methodology of getting subject matter across.

U.S.A.

I:19 It is not so much a subject matter as an enrichment technique.

I:16 No, only the study of Outdoor Education" principles, history, etc. is content in my view. Outdoor Education should be a process.

I:15. It is not a subject matter.

I:9 It depends entirely on the teacher.

OVERSEAS

I:6 I don't agree it is a subject matter.

Statement 27: Outdoor Education is a multi-disciplinary learning process oriented toward:

L'éducation Plein-Air est un processus d'apprentissage multi-disciplinaire, au niveau:

a. elementary (grade 1 to 6)
élémentaire.

The concept of multi-disciplinarity of EPA/OE as expressed in Statement 27 did not find opposition from any of the four groups (see Table 4). Table 3 suggests a unanimous agreement among the four groups for the elementary level. The greatest agreement is among Canadians, with 85% strongly agreeing, and 15% agreeing ($\overline{X}$=4.87; σ=.51). The Quebec group came second with a mean of 4.48, and a standard deviation of .51.

The difference expressed in Statement 27 is at a .037 level of significance.

b. secondary level (grades 7 to 12) (Stmt. 28)
secondaire.

The analysis concerning the multi-disciplinarity concept as discussed in Statement 27 is much the same for Statement 28, i.e., for secondary level, with the difference that the Quebecois do not tend to agree as strongly for secondary as for elementary grades (see Table 3, p. 52).

Among the four groups, the general significant difference is at the .015 level (see Table 4).

c. college level (Stmt. 29).
C.E.G.E.P.

Considering multi-disciplinarity at the college level as suggested in Statement 29, Table 4 expressed a difference significant at a .008 level between Quebec and Canada. Indeed, the Canadians recorded the highest agreement ($\overline{X}$=4.69), and Quebec the lowest level of agreement ($\overline{X}$=4.06).

The overseas group rated second from last in agreement with $\overline{X}$=4.70 (σ=.84). But they also agreed ($\overline{X}$=4.20; σ=.45 as per Table 4) to Statement 25, which considered EPA/OE as subject matter oriented.

d. adult education (Stmt. 30).
éducation permanente.

A significant difference at the .008 level is apparent between Quebec ($\overline{X}$=4.06, σ=0.43) and Canada ($\overline{X}$=4.69, σ=0.48) as far as the concept of multi-disciplinarity of adult education is concerned. Nineteen percent of the Quebec respondents remained undecided or neutral (N), 69% agreed (A), and only 6% strongly agreed (SA) with the statement.

Additional comments pertaining to Statements 27-30:

QUEBEC

I:23 ...which has an appeal to all ages regardless of academic level and can be adapted to many needs.

I:20 *L'éducation Plein-Air s'inscrit dans un processus....*

I:5 *On pourrait par une vie harmonieuse en Plein-Air y intégrer toutes les facettes de l'apprentissage tant à l'élémentaire qu'au secondaire.*

II:17 *Définition partielle.*

II:5 *Oui, parce que l'individu est placé dans une environnement dynamique.*

CANADA

I:18 Change (a), (b), (c), (c) to "all levels of learning."

I:8 Outdoor Education must become multi-graded as well as multi-disciplinary.

I:4 All levels of education.

II:16 *Education Plein-Air est souvent un processus multi-disciplinaire, "dans certains cas."*

U.S.A.

I:20 All levels, not any single level.

I:19 Toward all ages, pre-school to geriatrics, I agree with all, but disagree with any one separately.

I:18 "As part of outdoor education."

I:16 Should be a process.

OVERSEAS

I:2 Can be either subject or multi-disciplinary oriented, preferable to latter if program suitably modified.

The results of Statements 1-33 regarding Definitions of EPA/OE are summarized in Table 4, through the mean ($\overline{X}$) and standard deviation (σ), the mean square between groups (MS_b), the mean square error (MS_e), the degrees of freedom (df), the F-ratio, the F-probability, and the group subtests (expressed by .05 level of significance or less) resulting from the Tukey post hoc analysis.

Table 4.--Results of Phase II responses to Part I: Definitions of EPA/OE--Quebec, Canada, U.S.A., and overseas.

Stmt.	Quebec $\bar{X}$	Quebec σ	Canada $\bar{X}$	Canada σ	U.S.A. $\bar{X}$	U.S.A. σ	Overseas $\bar{X}$	Overseas σ	MS_b	MS_e	df	F	Prob. F	Tukey subsets** A	Tukey subsets** B
1	4.00	0.87	3.86	0.95	3.94	0.77	4.25	0.50	0.173	0.710	3,47	0.244	.865		
2	3.19	1.33	3.46	1.02	3.88	0.62	4.00	1.41	1.544	1.123	3,46	1.374	.262		
3	4.53	0.51	4.07	0.83	3.75	0.77	3.75	1.26	1.865	0.572	3,47	3.257	.030*	3,4,2	4,2,1
4	3.06	1.12	3.50	0.76	3.56	0.81	4.00	1.42	1.268	0.921	3,46	1.377	.262		
5	3.24	1.30	4.14	0.86	4.00	0.97	4.25	1.50	2.836	1.223	3,47	2.319	.087		
6	3.68	0.99	4.50	0.63	4.24	0.90	4.60	0.55	2.462	0.708	3,51	3.474	.023*	1,2,3,4	
7	3.68	1.08	4.25	0.58	4.06	0.83	3.40	0.89	1.491	0.740	3,53	2.013	.123	4,1,3,2	
8	3.58	0.90	4.50	0.52	4.29	0.92	4.60	0.55	3.172	0.629	3,53	5.034	.004*	1,3,2,4	
9	4.11	0.66	4.07	0.79	4.12	0.86	4.00	1.22	0.022	0.663	3,52	0.033	.992		
10	4.20	0.47	4.31	0.48	4.12	0.86	3.40	1.14	1.059	0.465	3,52	2.278	.090	4,1,3,2	
11	4.11	0.66	3.56	0.96	3.47	0.87	4.00	1.22	1.533	0.754	3,53	2.033	.120		
12	3.68	0.58	3.94	1.09	2.24	0.75	3.40	0.89	7.092	0.684	3,53	10.355	.000*	3	4,2,1
13	3.37	1.01	3.63	0.81	3.38	0.96	4.00	1.41	0.693	0.960	3,51	0.722	.543		
14	2.22	1.26	2.81	1.05	2.24	1.03	3.00	1.41	1.773	1.319	3,52	1.344	.270		
15	3.39	0.92	4.07	0.88	4.00	0.79	3.60	1.14	1.656	0.792	3,51	2.091	.113		
16	4.26	0.45	4.19	0.54	4.31	0.60	3.50	1.73	0.746	0.442	3,51	1.659	.181		
17	4.26	0.73	4.38	0.62	4.44	0.51	3.50	1.73	0.991	0.556	3,51	1.782	.162		
18	4.48	0.77	4.33	0,61	4.47	0.51	4.25	1.50	0.108	0.330	3,51	0.305	.892		
19	3.79	0.71	4.00	1.03	4.28	0.73	3.75	0.89	0.416	0.853	3,52	0.605	.614		
20	3.89	0.81	3.44	0.81	3.59	1.06	3.40	1.14	0.739	0.849	3,53	0.870	.462		
21	4.32	0.75	3.94	0.68	4.35	0.61	3.40	1.52	1.584	0.606	3,53	2.613	.061		
22	2.11	1.15	2.19	1.05	1.94	0.83	2.40	0.99	0.333	1.025	3,53	0.325	.087		
23	1.84	1.07	2.07	1.62	1.53	0.62	4.00	0.71	8.101	1.263	3,52	6.413	.001*	3,1,2	4
24	2.00	1.03	1.80	1.28	1.53	0.62	4.00	0.71	8.115	0.953	3,51	8.510	.000*	3,2,1	4
25	2.06	1.20	1.93	1.39	1.53	0.62	4.50	0.83	9.307	1.115	3,51	8.341	.000*	3,2,1	4
26	2.06	1.20	1.80	1.15	1.53	0.62	4.20	0.45	9.534	0.948	3,51	10.050	.000*	2,3,1	4
27	4.58	0.51	4.87	0.34	4.47	0.51	4.20	0.84	0.767	0.253	3,53	3.032	.037*	4,3,1,2	
28	4.39	0.50	4.87	0.34	4.47	0.51	4.20	0.84	0.955	0.251	3,52	3.802	.015*	4,1,3,2	
29	4.06	0.43	4.69	0.48	4.41	0.51	4.20	0.84	1.143	0.260	3,51	4.387	.008*	1,4,3	4,3,2
30	3.75	0.66	4.44	0.68	4.41	0.51	4.20	0.84	1.628	0.390	3,51	4.171	.010*	1,4	4,3,2
31	4.42	0.61	4.81	0.40	4.35	0.61	4.20	0.84	1.831	0.334	3,53	2.482	.071		
32	3.63	0.83	4.31	0.29	4.00	0.79	3.80	1.09	1.394	0.691	3,53	2.016	.123		

*$p \leq .05$.

**Subsets for which members within the subset do not differ in mean level of agreement. Groups in separate subsets differ at $p \leq .05$.

Part II: Objectives of EPA/OE

An ANOVA with a post hoc analysis was undertaken for each of the 13 statements of Part II, regarding "Objectives of EPA/OE." The analysis demonstrated the following statements as having a significant difference of .05 or less: Statements 39, 40, 41, 42, 48, and 49. The results of the analysis follow. (See Table 5.)

Statement 39: Help the individual to relate with his environment through different physical exercises.

Aider l'individu à se mettre en rapport avec son environnement par le biais des différents exercices physiques.

Amazingly enough, Quebec ($\bar{X}=2.32$; $=1.00$) was second to the U.S.A. ($\bar{X}=2.06$; $\sigma=0.66$, as per Charts F1 and F2, Appendix F), in their intensity of disagreement with Statement 39 (see Table 5). The mean of the overseas group ($\bar{X}=3.00$; see Chart F7) tended more toward agreement with the statement; however, a statistical analysis with a Tukey HSD test did not reveal any significant differences among the four groups (see Chart 6). There is a general difference (see Table 6) in the groups but that difference was not revealed through the application of this rather conservative test.

The American group disagreed with the statement (D=53%, SD=20%; Table 5). The standard deviation of the American responses was 0.66.

The overseas group, on the other hand, illustrated (see Table 6) the highest mean ($\bar{X}=3.00$) among the four groups. Fifty percent agreed and 50% were neutral or undecided about Statement 39.

Table 5.--Adjusted frequency (%), means ($\bar{X}$), and standard deviations (σ) of responses to objectives of EPA/OE (Statements 34-50).

Statement	Group[a]	Adjusted Frequency (%)					Mean	Std. Dev.
		SA	A	N	D	SD	$\bar{X}$	σ
34. **Provide unique opportunities for behavioral changes because of the particular setting offered by the out-of-doors.** *Fournir des occasions uniques pour des changements de comportements à cause de l'environnement particulier qu'offre le Plein-Air.*	I	28	61	6	6	0	4.11	0.74
	II	38	54	8	0	0	4.25	0.58
	III	60	40	0	0	0	4.43	0.51
	IV	50	0	50	0	0	4.00	0.71
35. Help to use wisely and protect the natural environment. *Aider à utiliser judicieusement et protéger l'environnement naturel.*	I	28	61	11	0	0	4.16	0.60
	II	31	69	0	0	0	4.38	0.50
	III	40	33	7	0	0	4.29	0.59
	IV	50	50	0	0	0	4.20	1.30
36. Provide outdoor settings that will make teaching more creative. *Fournir des situations de Plein-Air qui rendront l'enseignement plus créateur.*	I	28	61	11	0	0	4.16	0.60
	II	25	58	17	0	0	4.07	0.70
	III	20	80	0	0	0	4.12	0.49
	IV	50	50	0	0	0	3.60	1.14
37. Utilize surroundings and community resources for education, to the best advantage of the curriculum. *Utiliser les ressources environnantes de l'école et de la communauté pour fins éducatives, au meilleur avantage du curriculum.*	I	33	67	0	0	0	4.37	0.49
	II	54	46	0	0	0	4.56	0.51
	III	47	53	0	0	0	4.41	0.51
	IV	100	0	0	0	0	4.40	0.55
38. (All objectives of Outdoor Education are) the same as for Physical Education. *(Tous les objectifs du Plein-Air sont) les mêmes que ceux de l'éducation physique.*	I	0	6	6	22	67	1.63	1.01
	II	8	0	31	8	54	1.81	1.22
	III	0	0	0	33	67	1.35	0.49
	IV	0	0	50	50	0	2.22	0.84
39. Help the individual to relate with his environment through different physical exercises. *Aider l'individu à se mettre en rapport avec son environnement par le biais des différents exercices physiques.*	I	0	22	6	56	17	2.23	1.00
	II	8	15	46	23	8	2.88	1.09
	III	0	0	27	53	20	2.06	0.66
	IV	0	50	50	0	0	3.00	1.00

Table 5.--Continued.

Statement	Group	Adjusted Frequency (%)					Mean	Std. Dev.
		SA	A	N	D	SD	$\bar{X}$	σ
40. Organic and muscular development of the individual through Physical Education activities and sports in natural settings as primary goal. *Comme premier objectif, le développement organique et musculaire de l'individu à travers les sports et les activités de l'éducation physique effectuées dans les sites naturels.*	I	0	0	0	17	93	1.21	0.42
	II	0	15	31	15	35	2.25	1.18
	III	0	0	7	67	27	1.88	0.78
	IV	0	0	0	100	0	2.00	0.00
41. Help students to discover the important relationship that can and should exist between classroom instruction and outdoor learning. *Aider les étudiants à découvrir la relation importante qui peut et qui doit exister entre l'apprentissage en classe et l'apprentissage en milieu naturel.*	I	6	44	33	17	0	3.42	0.84
	II	15	62	25	0	0	3.94	0.57
	III	33	53	13	0	0	4.00	0.83
	IV	50	50	0	0	0	4.40	0.55
42. Provide an opportunity for direct learning experiences which foster implementation of the school curriculum in many areas. *Fournir une occasion pour des expériences directes d'apprentissage afin de favoriser l'approfondissement de plusieurs sujets du curriculum scolaire.*	I	22	61	6	11	0	3.95	0.85
	II	31	69	0	0	0	4.31	0.48
	III	73	20	7	0	0	4.59	0.62
	IV	50	0	0	50	0	3.40	1.82
43. Enable students to develop new (outdoor) skills and interests, and provide a basis for a lifetime of meaningful living. *Rendre les étudiants capables de développer de nouvelles habiletés et nouveaux intérêts et fournir une base pour une façon de vivre plus enrichissante.*	I	28	67	6	0	0	4.26	0.56
	II	54	38	8	0	0	4.31	0.70
	III	53	47	0	0	0	4.47	0.51
	IV	50	50	0	0	0	4.40	0.56
44. Contribute to the establishment of better relations between teachers and students through direct outdoor experiences. *Contribuer à l'établissement de meilleures relations entre professeurs et élèves à travers des expériences directes en Plein-Air.*	I	17	72	11	0	0	4.05	0.52
	II	46	38	8	8	0	4.31	0.87
	III	33	67	0	0	0	4.29	0.47
	IV	50	0	0	50	0	3.81	1.38

Table 5.--Continued.

Statement	Group	Adjusted Frequency (%)					Mean	Std. Dev.
		SA	A	N	D	SD	$\bar{X}$	σ
45. **Provide a context for the child's socialization to occur by giving him additional opportunities for social group life.** *Fournir un contexte de socialisation pour l'enfant en lui offrant des chances additionelles de vie sociale intense au sein d'un groupe.*	I	56	44	0	0	0	4.53	0.51
	II	61	23	8	8	0	4.38	0.88
	III	27	67	7	0	0	4.12	0.60
	IV	100	0	0	0	0	4.40	0.89
46. **To develop awareness, appreciation and understanding of the natural environment and man's relation to it.** *Développer la conscience, l'appréciation et la compréhension de l'environnement naturel et la relation de l'homme avec celui-ci.*	I	72	28	0	0	0	4.74	0.45
	II	61	39	0	0	0	4.56	0.51
	III	53	40	7	0	0	4.41	0.62
	IV	100	0	0	0	0	4.80	0.45
47. **To help realize, through Outdoor Education, the full potential of the individual toward optimum development of the mind, body and spirit.** *Aider à réaliser, à travers l'éducation Plein-Air, tout le potentiel de l'individu vers un développement complet de l'esprit, du corps et de l'âme.*	I	67	33	0	0	0	4.69	0.48
	II	69	15	0	15	0	4.38	1.02
	III	33	53	7	7	0	4.06	0.83
	IV	50	0	50	0	0	4.00	1.00
48. **Provide a meaningful setting for the development of the affective domain.** *Fournir un milieu très favorable au développement affectif de l'individu.*	I	78	22	0	0	0	4.78	0.43
	II	33	58	8	0	0	4.27	0.59
	III	53	40	7	0	0	4.35	0.70
	IV	50	50	0	0	0	3.80	1.30
49. **Provide the individual with unique opportunities to develop his creativity and his initiative.** *Fournir à l'individu des occasions uniques de développer son esprit de créativité et d'initiative dans un contexte significatif.*	I	89	11	0	0	0	4.89	0.32
	II	25	67	0	8	0	4.20	0.77
	III	40	47	13	0	0	4.24	0.66
	IV	50	0	50	0	0	4.00	1.00
50. **Provide an opportunity for "relief" from the boredom, drudgery and routine of many learning and teaching situations.** *Fournir une opportunité de "soupape" a l'ennui, la lassitude et la routine de plusieurs situations d'apprentissage et d'enseignement.*	I	17	39	22	6	17	3.33	1.33
	II	0	58	33	8	0	3.47	0.74
	III	7	50	36	7	0	3.56	0.73
	IV	50	0	50	0	0	4.00	1.41

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[a]Group I = Quebec, Group II = Canada, Group III = U.S.A., Group IV = overseas.

The following are some comments given by respondents in Phases I and/or II of the study which relate to Statement 39:

QUEBEC

I:28 *Surtout pour les niveaux secondaires et collégial.*

I:23 Outdoor education can...

I:15 *Formulation anglaise?*

I:5 *Laissons cet objectif aux fédérations.*

II:13 *Je ne comprends pas.*

II:5 *On fait encore ici état de moyens qui ne doivent en aucun cas déterminer la fin.*

II:3 *Aider l'individu à communiquer avec son environnement par le biais de différents exercises éducatifs.*

CANADA

I:16 *Par le biais d'une participation motrice.*

I:7 Physical exercise?

I:5 Only a part of the whole.

U.S.A.

I:20 What physical exercise?

I:16 ?? In part--needs to be amplified.

OVERSEAS

I:2 Outdoor Education probably, but not necessarily, involves physical activity.

Statement 40: Organic and muscular development of the individual through Physical Education activities and sports in natural settings as primary goal.

Comme premier objectif, le développement organique et musculaire de l'individu à travers les sports et les activités de l'éducation physique effectuées dans les sites naturels.

This particular objective as it appears in Statement 40, expressed difference at a .05 level, between the following subsets: (I, III, IV) and (III, IV, II)[4] (see Table 6). Quebec may thus be interpreted as being significantly different from Canada. The adjusted frequency of the responses for each group was as follows:

Quebec SA=0%, A=0%, N=0%, D=17%, SD=83%

Canada SA=0%, A=15%, N=31%, D=15%, SD=35%.

On one hand, Quebec had the strongest disagreement (SD=83%) and the lowest standard deviation (σ=0.42) concerning the concepts contained in Statement 40 ($\bar{X}$=1.21); on the other hand, Canada had the lowest level of disagreement with the statement. Fifteen percent of the Canadian respondents agreed (A) and 31% remained undecided or neutral (N) to the EPA/OE objective which emphasized organic and muscular development through physical education activities and sports in natural settings.

Additional comments pertaining to Statement 40:

QUEBEC

I:28 *Surtout pour secondaire 4 et 5 et le collégial.*

I:12 *Sports?*

I:8 *Pas premier objectifs!*

I:5 *Quelle est donc la différence entre Plein-Air et activités traditionnelles?*

II:17 *Objectif de développement de l'individu.*

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[4] Group I = Quebec, Group II = Canada, Group III = U.S.A., Group IV = overseas.

II:10 *Comme objectif.*

II:5 *Objectif ou conséquence?*

CANADA

I:13 I see Outdoor Education as a common method to all disciplines, not only physical education.

I:5 Primary goal: NO!

Statement 41: Help students to discover the important relationship that can and should exist between classroom instruction and outdoor learning.

Aider les étudiants à découvrir la relation importante qui peut et qui doit exister entre l'apprentissage en classe et l'apprentissage en milieu naturel.

The data on Statement 41 revealed a difference in the means and standard deviations between groups I and IV. The overseas experts expressed the highest mean ($\bar{X}$=4.40) and standard deviation (σ=.55) while the Quebecois showed the lowest level of agreement on this objective ($\bar{X}$=3.42 and σ=0.84). Only 6% strongly agreed, 44% agreed, 35% were neutral, and 17% disagreed. Quebec was the only group to offer disagreement with this particular objective.

The difference noted in the Tukey HSD test at a .022 level of significance did not specify the differences which occurred among the four groups of experts.

The following are some comments given by respondents in Phase I and/or II of the study which relate to Statement 41:

QUEBEC

I:28 *Surtout pour le niveau élémentaire. Ajouter: "comme une des inter-relations possibles au niveau du curriculum."*

I:5 *En terme d'intégration des matières, il ne devrait pas y avoir de différence.*

CANADA

I:17 All learning and real-life situations.

I:8 Not sure about this. Any relationship which is development should be a natural outgrowth of what is done but should not be an objective of Outdoor Education.

U.S.A.

I:20 Outdoor learning should be integral to instruction. The two terms are not parallel.

I:16 This seems appropriate for teacher education programs, perhaps.

I:12 Help students to learn in another environment beyond the school.

Statement 42: Provide an opportunity for direct learning experiences which foster implementation of the school curriculum in many areas.

Fournir une occasion pour des expériences directes d'apprentissage afin de favoriser l'approfondissement de plusieurs sujets du curriculum scolaire.

The analysis showed a difference significant at the .02 level between the two following subsets (IV, I, II) and (I, II, III), which may be interpreted as the overseas group being significantly different from the U.S.A. group concerning the objective cited in Statement 42. The mean the American group presented ($\bar{X}=4.59$) was the highest (A), and overseas the lowest ($\bar{X}=3.40$). The Quebecois responded with 11% in disagreement with this particular objective.

The following are some comments given by respondents in Phase I and/or II which relate to Statement 42:

QUEBEC

I:15 *...à l'élémentaire surtout.*

I:12 *Approfondissement, aussi découverte et sensibilisation.*

CANADA

I:7 Implementation?

Statement 48: Provide a meaningful setting for the development of the affective domain.

Fournir un milieu très favorable au développement affectif de l'individu.

The consideration of the affective domain as expressed in Statement 48 registered a significant difference at the level of .02 between group subsets (IV, II, III) and (II, III, I), which can be spelled out as a significant difference between Quebec and overseas. This important difference is also expressed in the means and standard deviations (Quebec: $\overline{X}$=4.78, σ=0.43; overseas: $\overline{X}$=3.00, σ=1.30). Indeed, 78% of the Quebecois strongly agreed (SA), and 28% agreed (A) on the objective concerning the affective domain.

The American group came second in agreement with a mean of 4.35 and a standard deviation of 0.70. There appears to be a major difference among groups.

The following are comments made by experts during Phase I and/or II which pertain to Statement 48:

QUEBEC

I:23 ...psychological?

II:5 *De la découlant les changements de comportement.*

CANADA

I:17 Both can be done in a natural environment also.

U.S.A.

I:15 I wish you had given more emphasis to affective domain.

Statement 49: Provide the individual with unique opportunities to develop his creativity and his initiative.

Fournir à l'individu des occasions uniques de développer son esprit de créativité et d'initiative dans un contexte significatif.

The results concerning the objective of creativity and initiative development are expressed in a significant difference at a .004 level between Quebec (I) and Europe (IV), Canada (II) and the U.S.A. (III).

The Quebec group rated very high in mean and standard deviation ($\overline{X}$=4.89, σ=0.32) in comparison with any other group, overseas ($\overline{X}$=4.00, σ=1.00), Canada ($\overline{X}$=4.20, σ=0.77) or the U.S.A. ($\overline{X}$=4.24, σ=0.66).

The objective in Statement 49 received the highest rating of all objectives identified in Part II. This is clearly signified in Quebec's response frequency, SA=89% and A=11%.

The following are comments made by experts during either Phase I or II of the study which pertain to Statement 49:

QUEBEC

II:17 *Objectif de développement de l'individu.*

U.S.A.

I:19 Possibly others relating to (1) development of self-reliance, (2) improving group dynamics skills, (3) developing a personal environmental ethic.

II:24 Not sure that we can improve his creativity.

OVERSEAS

I:2 Will depend on the individual's attitude to the outdoor situation, to his companions, and to his teacher.

The results of Statements 34-50 regarding "Objectives of EPA/OE" are summarized in Table 6, through the mean, standard deviation, the mean square between groups (MS_b), the mean square error (MS_e), the degrees of freedom (df), the F-ratio, the F-probability, and the group subsets (expressed by .05 level of significance or less) resulting from the Tukey post hoc analysis.

Part III: Social and Cultural Environment and EPA/OE

An ANOVA with a Tukey post hoc analysis (HSD) was undertaken for each of the 11 statements of Part III, regarding the "Social and Cultural Environments of EPA/OE." The analysis demonstrated the following statements to have a significant difference of .05 or less: Statements 51 and 57 (see Table 7).

Statement 51: Urbanization has deprived children of close contact with the land.
L'urbanisation a dépourvu les enfants d'un contact étroit avec la terre.

The concept of urbanization depriving children of close contact with the land exhibited a difference at a level of .003, but the Tukey HSD test was too conservative to express any significance between any of the four groups on a pairwise basis. The means and standard deviations showed the highest agreement by the Quebec group ($\bar{X}$=4.89, σ=0.32), the second highest agreement was in the U.S.A. ($\bar{X}$=4.53, σ=0.51), Europe was third ($\bar{X}$=4.60, σ=0.55), and the lowest level of agreement was from Canadians ($\bar{X}$=4.44, σ=0.81). Only 8% of the Canadians expressed some disagreement with this particular statement of Part III.

Table 6.--Results of Phase II responses to Part II: Objectives of EPA-OE--Quebec, Canada, U.S.A., and overseas.

	Quebec		Canada		U.S.A.		Overseas							Tukey subsets**	
Stmt.	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	MS_b	MS_e	df	F	F pr.	A	B
33	4.11	0.46	3.80	1.08	4.06	0.56	4.00	1.22	0.290	.600	3,52	0.484	.695		
34	4.11	0.74	4.25	0.58	4.43	0.51	4.00	0.71	0.676	.397	3,53	0.170	.177		
35	4.16	0.60	4.38	0.50	4.29	0.59	4.20	1.30	0.149	.426	3,53	0.349	.790		
36	4.16	0.60	4.07	0.70	4.12	0.49	3.60	1.14	0.430	.431	3,52	0.997	.402		
37	3.37	0.49	4.56	0.51	4.41	0.51	4.40	0.55	0.119	.258	3,53	0.464	.709		
38	1.63	1.01	1.81	1.22	1.35	0.49	2.22	0.84	1.147	.897	3,53	1.279	.291		
39	2.32	1.00	2.88	1.09	2.06	0.66	3.00	1.00	2.448	.883	3,53	2.772	.050*	3,1,2,4	
40	1.21	0.42	2.25	1.18	1.88	0.78	2.00	1.00	3.353	.652	3,52	5.140	.003*	1,3,4	3,4,2
41	3.42	0.84	3.94	0.57	4.00	0.83	4.40	0.55	1.456	.560	3,53	3.490	.022*	1.2,3,4	
42	3.95	0.85	4.31	0.48	4.59	0.62	3.40	1.82	2.391	.673	3,53	3.550	.020*	4,1,2	1,2,3
43	4.26	0.56	4.31	0.70	4.47	0.51	4.40	0.56	1.410	.350	3,53	4.850	.750		
44	4.05	0.52	4.31	0.87	4.29	0.47	3.81	1.38	4.100	.404	3,53	1.013	.394		
45	4.53	0.51	4.38	0.88	4.12	0.60	4.40	0.89	0.510	.480	3,53	1.063	.373		
46	4.74	0.45	4.56	0.51	4.41	0.62	4.80	0.45	0.393	.274	3,53	1.434	.243		
47	4.69	0.48	4.38	1.02	4.06	0.83	4.00	1.00	1.395	.656	3,53	2.125	.108		
48	4.78	0.43	4.27	0.59	4.35	0.70	3.80	1.30	1.551	.445	3,51	3.480	.022*	4,2,3	2,3,1
49	4.89	0.32	4.20	0.77	4.24	0.66	4.00	1.00	2.048	.416	3,51	4.919	.004*	4,2,3	1

*$p \leq .05$.

**Subsets for which members within the subset do not differ in mean level of agreement. Groups in separate subsets differ at $p \leq .05$.

Table 7.--Adjusted frequency (%), means ($\bar{X}$), and standard deviations (σ) of responses to social and cultural environments of EPA/OE (Statements 51-61).

Statement	Group[a]	Adjusted Frequency (%)					Mean $\bar{X}$	Std. Dev. σ
		SA	A	N	D	SD		
51. **Urbanization has deprived children of close contact with the land.** *L'urbanisation a dépourvu les enfants d'un contact étroit avec la terre.*	I	94	6	0	0	0	4.89	0.32
	II	46	46	0	8	0	4.44	0.81
	III	60	40	0	0	0	4.53	0.51
	IV	50	50	0	0	0	4.60	0.55
52. **Automation and mechanization have dulled creative energy of many young people.** *L'automation et la mécanisation ont contribué à diminuer l'énergie créatrice de beaucoup de nos jeunes gens.*	I	39	44	17	0	0	4.11	0.88
	II	15	54	15	8	8	3.81	1.11
	III	40	40	13	7	0	4.12	0.8[illegible]
	IV	50	50	0	0	0	4.40	0.89
53. **There has been an increase in interest and use of the outdoors for relaxation and stabilization of body and mind.** *Il y a eu une augmentation dans l'intérêt et l'utilisation du Plein-Air pour la relaxation et la stabilisation du corps et de l'esprit.*	I	22	78	0	0	0	4.21	0.42
	II	23	69	8	0	0	4.31	0.60
	III	67	33	0	0	0	4.47	0.80
	IV	50	50	0	0	0	4.07	0.71
54. **There is a widespread lack of knowledge and appreciation and skill for participation in meaningful outdoor experiences.** *Il y a un vaste manque de connaissances et d'habileté pour la participation à des expériences enrichissantes en Plein-Air*	I	28	56	11	6	0	4.05	0.78
	II	31	54	15	0	0	4.31	0.70
	III	27	67	7	0	0	4.18	0.53
	IV	50	50	0	0	0	4.20	0.84
55. Modern society has increased the need for mental and physical fitness,	I	47	41	11	0	0	4.33	0.69
	II	36	55	9	0	0	4.31	0.63
	III	36	43	14	7	0	4.07	0.88
	IV	50	0	50	0	0	3.75	0.96
--for regaining contact with basic realities found in nature,	I	24	35	24	18	0	3.61	1.04
	II	30	60	10	0	0	4.25	0.62
	III	50	36	7	7	0	4.27	0.88
	IV	50	0	50	0	0	3.80	0.84
--for more creative living, and for spiritual satisfactions.	I	17	17	39	28	0	3.21	1.03
	II	17	58	25	0	0	3.93	0.70
	III	47	40	7	7	0	4.24	0.83
	IV	50	0	50	0	0	3.60	0.89
La société moderne a augmenté le besoin pour la bonne forme physique et mentale, *--pour reprendre contact avec les réalités fondamentales trouvées dans la nature,* *--pour une vie plus enrichissante et pour des satisfactions spirituelles.*								

Table 7.--Continued.

Statement	Group	Adjusted Frequency (%) SA	A	N	D	SD	Mean $\bar{X}$	Std. Dev. σ
58. In any social setting, man has the need to live peaceably with others and with nature, and to develop tolerance, self-reliance, and understanding. *Dans un contexte social, l'homme a besoin de vivre en paix avec les autres et avec la nature; il a aussi besoin de développer de la tolérance, de la confiance en soi et de la compréhension.*	I	56	39	6	0	0	4.53	0.61
	II	31	61	0	8	0	4.13	0.72
	III	67	33	0	0	0	4.59	0.51
	IV	50	50	0	0	0	4.60	0.55
59. A free public education for all children is important in society, and the school should act as an agent for fostering the development of the individual to his fullest potential as well as for fostering democratic values and passing on the cultural heritage. *Une éducation publique gratuite est importante dans notre société et l'école devrait agir comme un agent pour favoriser le développement des potentialités d'un individu aussi pour l'épanouissement des valeurs démocratiques et la transmission de l'héritage culturel.*	I	29	35	35	0	0	3.94	0.80
	II	46	46	8	0	0	4.31	0.61
	III	67	27	7	0	0	4.59	0.62
	IV	100	0	0	0	0	4.60	0.55
60. The natural environment setting constitutes a "relief" for the individual who often cannot, in his everyday life, find relaxation and peace. *Le contexte de l'environnement naturel sert de "soupape" pour l'individu qui souvent ne peut, à travers son quotidien, trouver matière à détente et paix.*	I	24	41	35	0	0	3.88	0.78
	II	0	67	25	8	0	3.73	0.70
	III	20	66	13	0	0	3.05	0.56
	IV	50	0	50	0	0	3.80	1.30
61. Experiences of outdoor living can develop an appreciation for the life style of native inhabitants, colonists and explorers of the land. *Les expériences de vie au grand air peuvent développer une appréciation pour le style de vie des groupes ethniques, des premiers colons et des explorateurs du pays.*	I	12	77	6	6	0	3.94	0.66
	II	42	42	17	0	0	4.36	0.74
	III	27	47	27	0	0	3.94	0.75
	IV	50	50	0	0	0	4.50	0.70

[a] Group I = Quebec, Group II = Canada, Group III = U.S.A., Group IV = overseas.

Additional comments pertaining to Statement 51:

QUEBEC

I:22 *C'est souvent cela que se passe.*

I:5 *Et aussi la nature. Ex., on détruit pour les olympiques à Montréal, le seul espace vert de l'ile (de Montréal).*

CANADA

I:17 Not necessarily so.

II:16 *Pour les classes sociales inférieures...cependant les classes à l'aise peuvent se payer l'opportunité d'envoyer l'enfant au camp d'été ou d'avoir un chalet ou camper en famille.*

U.S.A.

I:20 If you mean "working the land," okay, but if you mean "relating to environment," not necessarily so.

Statement 57: Modern society has increased the need for mental and physical fitness,--for regaining contact with basic realities found in nature,--for more creative living, and for spiritual satisfactions.

La société moderne a augmenté le besoin pour la bonne forme physique et mentale,--pour reprendre contact avec les réalités fondamentales trouvées dans la nature,--pour une vie plus enrichissante et pour des satisfactions spirituelles.

The analysis (ANOVA with Tukey post hoc procedures) revealed a significant difference at a level of .008 between the Quebec respondents and the American sample concerning the assumption that society has increased the need for mental and physical fitness for more creative living and for spiritual satisfaction. Indeed, the majority of the American sample agreed (30%=SA, 60%=A) to the premise. However, among the Quebec respondents, 18% expressed disagreement and 24% remained undecided on Statement 57.

Additional comments which pertain to Statement 57:

QUEBEC

I:15 Too much!

I:8 *Dans le contexte Quebécois, la bonne forme physique et mental est prêchée en fonction d'objectifs plutôt matériels.*

I:5 *Pas avec le contact des réalités fundamentales mais bien l'activité physique pour l'activité afin de "robotiser" l'individu vers une forme de matérialisme productif.*

II:13 *Par voie de conséquence.*

CANADA

I:16 *Je ne sais pas que le contact avec la nature soit bon et enrichissant pour chaque être. Dans la société toutefois il est bon que tous aient une relation positive avec la nature.*

U.S.A.

II:16 What aspects of modern society?

II:24 Modern society has moved away from a need for physical fitness. There are things that do the work for us.

Statement 59: A free public education for all children is important in society, and the school should act as an agent for fostering the development of the individual to his fullest potential as well as for fostering democratic values and passing on the cultural heritage.

Une éducation publique gratuite est importante dans notre société et l'école devrait agir comme un agent pour favoriser le développement des potentialités d'un individu aussi pour l'épanouissement des valeurs démocratiques et la transmission de l'héritage culturel.

The analysis (ANOVA with HSD procedures) unveiled a difference at .03 among the groups, but did not submit any particular pairwise differences within the group subset (I, II, III, IV).

Nevertheless, the means and standard deviations recorded a stronger agreement in the overseas group ($\bar{X}=4.60$, $\sigma=.55$), the U.S.A. ($\bar{X}=4.59$, $\sigma=0.62$) and Canada ($\bar{X}=4.31$, $\sigma=.61$) than in Quebec ($\bar{X}=3.94$, $\sigma=0.80$).

Additional comments pertaining to Statement 59:

QUEBEC

I:23 The classroom too often cramps and limits the individual. Stronger emphasis on the value of Outdoor Education could do much to foster....

I:18 *C'est vrai comme concept ou comme objectif, mais ce n'est pas la réalité. L'école est le reflet de la societé; elle contrôle.... La complexité de la société se sent imposée à l'école. L'enfant risque de perdre son authenticité naturelle.*

I:12 *"Agit": on devrait lire, "devrait agir"....*

I:4 *Ajouter: "l'école d'aujourdhui vs. l'éducation libre qui l'on vise."*

II:17 *Education publique gratuite, accessible à tous.*

I:28 *Les organisme extra-scolaires ont aussi une note très importante à jouer en vue de l'épanouissement des valeurs culturelles. Exemple: les différents programmes du Ministère des Affaires Culturelles. Idem pour le Ministère des Affaires Indiennes et du Grand Nord, ainsi que différents groupes publics et privés.*

The results of Statements 50-61 regarding "Social and Cultural Environments of EPA/OE" are summarized in Table 8, through the mean, standard deviation, the mean square between groups (MS_b), the mean square error (MS_e), the degrees of freedom (df), the F-ratio, the F-probability, and the group subsets (expressed by .05 level of significance or less) resulting from the Tukey post hoc analysis.

Table 8.--Results of Phase II responses to Part III: Social and cultural environments of EPA/OE--Quebec, Canada, U.S.A., and overseas.

	Quebec		Canada		U.S.A.		Overseas							Tukey subsets**	
Stmt.	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	MS_b	MS_e	df	F	Fpr.	A	B
50	3.33	1.33	3.47	0.74	3.56	0.73	4.00	1.41	0.345	1.014	3.47	0.340	0.796		
51	4.89	0.32	4.44	0.81	4.53	0.51	4.60	0.55	0.700	0.233	3,53	2.163	0.003*	2,3,4,1	
52	4.11	0.88	3.81	1.11	4.12	0.86	4.40	0.89	0.550	0.890	3,53	0.618	0.607		
53	4.21	0.42	4.31	0.60	4.47	0.81	4.07	0.71	0.366	0.393	3,53	0.932	0.432		
54	4.05	0.78	4.31	0.70	4.18	0.53	4.20	0.84	0.196	0.484	3.53	0.406	0.749		
55	4.33	0.69	4.31	0.63	4.07	0.88	3.75	0.96	0.515	0.575	3,46	0.897	0.450		
56	3.61	1.04	4.25	0.62	4.27	0.88	3.80	0.84	1.573	0.788	3,46	1.995	0.280		
57	3.21	1.03	3.93	0.70	4.24	0.83	3.60	0.89	3.383	0.776	3,52	4.360	0.008*	1,4,2	4,2,3
58	4.53	0.61	4.13	0.72	4.59	0.51	4.60	0.55	0.743	0.373	3,53	1.990	0.127		
59	3.94	0.80	4.31	0.61	4.59	0.62	4.60	0.55	1.379	0.455	3,52	3.028	0.038*	1,2,3,4	
60	3.88	0.78	3.73	0.70	3.05	0.56	3.80	1.30	0.298	0.568	3,50	0.524	0.668		
61	3.94	0.66	4.36	0.74	3.94	0.75	4.50	0.71	0.694	0.513	3,46	1.354	0.269		

*$p \leq .05$.

**Subsets for which members within the subset do not differ in mean level of agreement. Groups in separate subsets differ at $p \leq .05$.

Part IV: Learning and EPA/OE

An ANOVA with a post hoc analysis was undertaken for each of the 13 statements of Part IV, regarding "Learning and EPA/OE." The analysis demonstrated the following statements to have a significant difference of .05 or less: Statements 63, 64, 66, 67, and 70 (see Table 9).

Statement 63: Most children and youth can be described as tending to be adventurous, exploratory minded, active, energetic and curious.

La plupart des enfants et adolescents peuvent être décrits comme étant actifs, énergiques, curieux, jouissant d'un esprit d'exploration et d'aventure.

Statement 63 showed a difference at a .013 level among the four groups; however, the Tukey HSD test again did not express any specific difference between paired groups.

The means and standard deviations of the U.S.A. ($\bar{X}$=4.18, σ=0.73) offered the highest agreement of the four groups. Quebec ($\bar{X}$=3.89, σ=0.82) was second in agreement.

Additional comments pertaining to Statement 63:

QUEBEC

I:18 *Il y a exploration cinétique (voulant franchir les montagnes) et exploration immobile (démonter une montée pour tenter de la reconstruire).*

I:5 *L'école tue cet énergie et cet esprit d'aventure.*

II:5 *Le valeur et que l'école actuelle tue le dynamisme et la créativité des jeunes par des situation d'apprentissage trop stéréotypés.*

EUROPE

I:2 Emphasizing "normal."

Table 9.--Adjusted frequency (%), means ($\bar{X}$), and standard deviations (σ) of responses to learning and EPA/OE (Statements 62-74).

Statement		Adjusted Frequency (%)					Mean	Std. Dev.
	Group	SA	A	N	D	SD	$\bar{X}$	σ
62. The nature of man is such that he has a need for non-artificial environment and cannot be separated from it; to separate him causes continuous pressures. *La nature de l'homme est telle, qu'en général, il a besoin d'un environnement non-artificiel dont il ne peut pas être séparé; l'en priver cause des pressions continuelles.*	I	22	44	28	6	0	3.89	0.88
	II	0	61	39	0	0	3.69	0.48
	III	40	40	20	0	0	4.18	0.73
	IV	50	50	0	0	0	3.40	1.52
63. Most children and youth can be described as tending to be adventurous, exploratory minded, active, energetic and curious. *La plupart des enfants et adolescents peuvent être décrits comme étant actifs, énergiques, curieux, jouissant d'un esprit d'exploration et d'aventure.*	I	67	33	0	0	0	4.68	0.48
	II	23	69	8	0	0	4.25	0.58
	III	87	13	0	0	0	4.76	0.44
	IV	100	0	0	0	0	4.00	1.10
64. Most children possess a natural yearning for the active outdoor life and respond readily and happily to it. *La plupart des enfants possèdent un penchant naturel pour une vie active en Plein-Air et réagissent d'emblée et agréablement à celle-ci*	I	56	44	0	0	0	4.58	0.51
	II	31	61	8	0	0	3.51	0.60
	III	20	73	0	0	7	4.00	0.87
	IV	50	0	0	50	0	3.60	1.14
65. Most methods (methodology) used in Outdoor Education provide motivation for learning. *La plupart des méthodes* utilisées dans l'enseignement en Plein-Air favorisent le développement d'une motivation.*	I	17	72	6	6	0	4.00	0.67
	II	0	69	23	8	0	3.69	0.60
	III	13	80	0	7	0	4.00	0.61
	IV	0	0	100	0	0	3.20	0.45
66. The outdoors can be approached through discovery, exploration, adventure, and research in which there is intense interest in activities that are natural to children and problem solving is used in the context of natural settings. *Le Plein-Air peut être approché à travers la découverte, l'exploration et l'aventure, et la recherche dans laquelle il y a un intérêt intense dans les activités qui sont naturelles pour les enfants; aussi, la méthode de résolution de problèmes est employée dans le contexte de sites naturels.*	I	73	27	6	6	0	4.68	0.48
	II	38	62	0	0	0	4.44	0.51
	III	40	60	0	0	0	4.41	0.51
	IV	50	50	0	0	0	3.80	0.84

Table 9.--Continued.

Statement	Group	Adjusted Frequency (%) SA	A	N	D	SD	Mean $\bar{X}$	Std. Dev. σ
67. Develop the "self-concept" of the individual through all kinds of outdoor settings demanding continuous adaptations. *Developper le "moi" de l'individu par toutes sortes de situations de Plein-Air exigeant des adaptations continuelles.*	I	72	28	0	0	0	4.68	0.48
	II	46	54	0	0	0	4.50	0.52
	III	27	60	13	0	0	4.06	0.66
	IV	0	50	50	0	0	3.60	0.55
68. There is an "open/free" atmosphere in outdoor experiences in which teacher/pupil rapport develops and allows students to become actively involved in planning with the teacher for learning experiences. *L'atmosphère particulière dans les expériences de Plein-Air peut améliorer le rapport professeur-élève et permet aux étudiants de devenir directement impliqués avec les professeurs dans la planification des expériences d'apprentissage.*	I	67	33	0	0	0	4.63	0.50
	II	46	46	0	8	0	4.38	0.81
	III	27	60	7	7	0	4.06	0.75
	IV	50	50	0	0	0	4.40	0.55
69. Man is part of nature and continuous with nature. His flexibility and adaptability permit him to survive in widely differing environments, both physical and cultural. In many cases,	I	60	33	7	0	0	4.50	0.63
	II	33	67	0	0	0	4.36	0.50
	III	43	50	7	0	0	4.31	0.60
	IV	100	0	0	0	0	4.60	0.55
70.--humans have to re-learn how to live in a natural versus artificial environment,	I	65	35	0	0	0	4.65	0.49
	II	15	77	8	0	0	4.13	0.50
	III	43	43	14	0	0	4.25	0.68
	IV	100	0	0	0	0	4.60	0.55
71.--live better in urban environments.	I	38	56	6	0	0	4.31	0.60
	II	15	77	8	0	0	4.13	0.50
	III	33	53	13	0	0	4.18	0.64
	IV	50	0	0	50	0	4.00	1.22
L'homme est partie intégrante et continue de la nature. Sa flexibilité et son adaptabilité lui permettent de survivre dans des environnements très différents, à la fois physiques et culturels. Dans plusieurs cas, le humains ont à réapprendre *--comment vivre dans un environnement naturel versus un environnement artificiel,* *--à mieux vivre dans les environnements urbains.*								

Table 9.--Continued.

Statement	Group	Adjusted Frequency (%) SA	A	N	D	SD	Mean $\bar{X}$	Std. Dev. σ
72. Outdoor Education provides for the integration of learning in a setting that allows creative teaching with opportunities of acquiring specific skills and knowledge. *L'Éducation Plein-Air favorise l'intégration de l'apprentissage dans une situation qui permet un enseignement créateur, avec des opportunités pour l'acquisition d'habiletés et et de connaissances spécifiques.*	I	50	44	0	6	0	4.37	0.76
	II	39	46	15	0	0	4.31	0.70
	III	53	47	0	0	0	4.47	0.51
	IV	50	50	0	0	0	4.40	0.55
73. Students can become actively involved in planning for outdoor learning experiences; this may increase student-teacher rapport. *Les étudiants peuvent devenir activement impliqués dans la planification des expériences d'apprentissage de Plein-Air, ceci peut améliorer le rapport élève/professeur.*	I	72	28	0	0	0	4.59	0.62
	II	58	25	17	0	0	4.27	0.72
	III	53	47	0	0	0	4.43	0.51
	IV	50	0	50	0	0	4.09	0.94
74. The multisensory approach of tasting, looking, smelling, hearing, and touching provides direct learning experience that should be used in the out-of-doors. *La méthode multi-sensorielle de l'odorat, de la vue, de l'ouïe et du toucher procure une expérience directe d'apprentissage qui devrait être utilisé en Plein-Air.*	I	72	28	0	0	0	4.56	0.56
	II	67	33	0	0	0	4.61	0.61
	III	87	13	0	0	0	4.80	0.41
	IV	50	50	0	0	0	4.27	0.65

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[a] Group I = Quebec, Group II = Canada, Group III = U.S.A., Group IV = overseas.

Statement 64: Most children possess a natural yearning for the active outdoor life and respond readily and happily to it.

La plupart des enfants possèdent un penchant naturel pour une vie active en Plein-Air et réagissent d'emblée et agréablement à celle-ci.

The ANOVA and Tukey HSD procedures presented a significant difference at the .023 level, between the following group subsets: (IV, III, II) and (II, III, I), which depicts Quebec as different from overseas.

Indeed, differences are borne out in the following means and standard deviations: Quebec, $\overline{X}=4.58$, $\sigma=0.51$; overseas, $\overline{X}=3.00$, $\sigma=1.14$). Canada ($\overline{X}=3.51$, $\sigma=0.60$) ranked after the U.S.A. ($\overline{X}=4.00$, $\sigma=0.87$), even with 7% of the American group strongly disagreeing (SD) with this statement regarding the natural yearning of children for active outdoor lives.

Additional comments pertaining to Statement 64:

QUEBEC

I:23 Many children....

I:10 *...devrait naturellement posséder....*

I:5 *La société par les biais de l'école tue le dynamisme des individus.*

II:13 *Dépendamment de leur milieux de provenance, ils doivent être plus ou moins dirigés.*

CANADA

I:12 Many do not care for the outdoors ("too cold, wet feet").

II:16 50%+.

Statement 66: The outdoors can be approached through discovery, exploration, adventure, and research in which there is intense interest in activities that are natural to children and problem solving is used in the context of natural settings.

Le Plein-Air peut être approché à travers la découverte, l'exploration et l'aventure, et la recherche dans laquelle il y a un intérêt intense dans les activités qui sont naturelles pour les enfants; aussi, la méthode de résolution de problèmes est employée dans le contexte de sites naturels.

The ANOVA and Tukey HSD test exhibited a difference significant at .016 between group subsets (IV, III, II) and (III, II, I), which can be explained as an important difference between the overseas group respondents and the Quebec respondents.

Means and standard deviations of responses to Statement 66 exposed the highest agreement in the Quebec group ($\bar{X}$=4.68, σ=0.48), while the overseas group presented the lowest level of agreement ($\bar{X}$=3.80, σ=0.84).

Regarding the methodology as expressed in Statement 66, Quebec is closer to the U.S.A. than is overseas, even though Quebec had 6% neutral and 6% in disagreement.

Additional comments pertaining to Statement 66:

QUEBEC

I:26 *Devrait être approché....*

I:23 The outdoors should be...research which involves activities ...and through problem solving used.

I:15 Stress on problem solving.

I:13 *Devrait être....*

I:12 *Une méthodologie utilisant la résolution de problèmes dans un context (cycle complet) d'individualisation de l'enseignement.*

I:11 *le contact avec les milieux naturels se réalise par... recherche. Les enfants y trouvent des activités, tout naturellement. Dans le context des espaces naturels, résolution de problèmes est largement utilisée.*

U.S.A.

I:18 Not clear.

I:17 Learning in the outdoors is best applied through....

I:16 So much depends on other variables, teacher timing and so forth.

II:15 This is the "wholistic approach" which I heartily approve!!

OVERSEAS

I:1 Should be so at least.

Statement 67: Develop the "self-concept" of the individual through all kinds of outdoor settings demanding continuous adaptations.

Développer le "moi" de l'individu par toutes sortes de situations de Plein-Air exigeant des adaptations continuelles.

An ANOVA with the Tukey HSD procedures made apparent a significant difference at a .000 level among the group subsets (IV, III), (III, II), and (II, I). The three differences illustrated by these results are as follows: first, between Quebec and Canada; second, between Canada and the U.S.A.; and finally, Canada and the overseas group.

On the overall means, Quebec rated first in agreement (72% SA, 28% A) with Statement 67, and an $\bar{X}=4.68$ and $\sigma=0.48$. The overseas group ranked last ($\bar{X}=3.60$, $\sigma=0.55$).

Additional comments pertaining to Statement 67:

QUEBEC

I:23 Outdoor education should....

U.S.A.

I:20 The adaptation doesn't necessarily develop self-concept--it is the nature of activity and impact of perceptions on self.

I:15 But so does all of education.

Statement 70: Man is part of nature and continuous with nature. His flexibility and adaptability permit him to survive in widely differing environments, both physical and cultural. In many cases, humans have to re-learn how to live in a natural versus artificial environment, live better in urban environments.

L'homme est partie intégrante et continue de la nature. Sa flexibilité et son adaptabilité lui permettent de survivre dans des environnements très différents, à la foix physiques et culturels. Dans plusieurs cas, les humains ont à réapprendre comment vivre dans un environnement naturel versus un environnement artificiel, à mieux vivre dans les environnements urbains.

The ratings of Statement 70, subjected to an ANOVA with a Tukey HSD, illustrated a difference significant at 0.044 between group subsets (II, III, IV) and (III, IV); i.e., a difference occurred between the Quebec group and the Canadian group concerning the concepts of natural versus artificial environments as quoted in Statement 70.

This difference is well laid out in the means and standard deviations of the responses. Indeed, the Quebec group ranked first (65% SA, 35% A) in agreement to the statement ($\bar{X}=4.65$, $\sigma=.49$), and the Canadian group of respondents was classified last in terms of agreement with $\overline{X}=4.13$ and $\sigma=.50$.

Additional comments pertaining to Statement 70:

QUEBEC

I:11 *Sa souplesse et...la mobilité des population expliquent beaucoup de drames écologiques. L'environnement n'arrive pas toujours à s'adapter à ces variations de populations. Ex. les Européens en Amérique du Sud, les blancs dans le Nord, etc.*

I:5 *Ceci est bien malheureux mais c'est un fait. C'est pourquoi l'éducation Plein-Air dans le contexte Québecois urge.*

CANADA

I:12 Many don't survive in any environment.

II:16 *Est-ce vraiment ce qu'il faut? Il faut surtout apprendre à vivre en ville.*

The results of Statements 62-74 regarding "Learning and EPA/OE" are summarized in Table 10 through the mean, standard deviation, the mean square between groups (MS_b), the mean square error (MS_e), the degrees of freedom (df), the F-ratio, the F-probability, and the group subsets (expressed by .05 level of significance or less) resulting from the Tukey post hoc analysis.

Part V: Outdoor Education Teacher Curriculum

An ANOVA with a post hoc analysis was undertaken for each of the 23 statements of Part V, regarding "Teacher Education, Curriculum and EPA/OE." The analysis demonstrated the following statements to have a significant difference of .05 or less: Statements 90 and 91 (see Table 11).

Table 10.--Results of Phase II responses to Part IV: Learning and EPA/OE--Quebec, Canada, U.S.A., and overseas.

	Quebec		Canada		U.S.A		Overseas							Tukey subsets**		
Stmt.	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	MS_b	MS_w	df	F	Fpr.	A	B	C
62	3.89	0.88	3.69	0.48	4.18	0.73	3.40	1.52	1.080	.658	3,53	1.642	.191			
63	4.68	0.48	4.25	0.58	4.76	0.44	4.00	0.22	1.348	.342	3,53	3.936	*.013	4.2.1.3		
64	4.58	0.51	3.51	0.60	4.00	0.87	3.60	1.14	1.764	.514	3,53	3.429	*.023	4.3.2	2.3.1	
65	4.00	0.67	3.69	0.60	4.00	0.61	3.20	0.45	1.113	.381	3,53	2.917	*.043	4.2.1.3		
66	4.68	0.48	4.44	0.51	4.41	0.51	3.80	0.84	1.060	.282	3,53	3.755	*.016	4.3.2	3.2.1	
67	4.68	0.48	4.50	0.52	4.06	0.66	3.60	0.55	2.243	.306	3,53	7.325	*.000	4.3	3.2	2.1
68	4.63	0.50	4.38	0.81	4.06	0.75	4.40	0.55	0.583	.458	3,53	2.14	.106			
69	4.50	0.63	4.36	0.50	4.31	0.60	4.60	0.55	0.167	.337	3,47	0.495	.687			
70	4.65	0.49	4.13	0.50	4.25	0.68	4.60	0.55	0.920	.316	3,50	2.906	*.044	2.3.4	3.4.1	
71	4.31	0.60	4.13	0.50	4.18	0.64	4.00	1.22	0.163	.433	3,50	3.770	.770			
72	4.37	0.76	4.31	0.70	4.47	0.51	4.40	0.55	0.071	.439	3,53	0.163	.921			
73	4.60	0.48	4.47	0.74	4.47	0.51	4.20	0.84	0.369	.363	3,52	1.018	.392			
74	4.68	0.48	4.73	0.46	4.77	0.44	4.40	0.55	0.180	.217	3,52	0.831	.483			

*$p \leq .05$

**Subsets for which members within the subset do not differ in mean level of agreement. Groups in separate subsets differ at $p \leq .05$.

Table 11.--Adjusted frequency (%), means ($\bar{X}$), and standard deviations (σ) of responses to teacher education and curriculum and EPA/OE (Statements 75-97).

Statement	Group[a]	Adjusted Frequency (%) SA	A	N	D	SD	Mean $\bar{X}$	Dev. σ
75. Based on the premise that Outdoor Education is a multi-disciplinary learning process, Outdoor Education should be included in teacher education curricula. *En nous basant sur la prémisse que l'Education Plein-Air est un processus d'apprentissage multi-disciplinaire, l'Education Plein-Air devrait être incluse dans les programmes de formation des maîtres.*	I	72	28	0	0	0	4.68	0.48
	II	92	8	0	0	0	4.93	0.26
	III	86	14	0	0	0	4.75	0.45
	IV	100	0	0	0	0	4.80	0.45

In an Outdoor Education curriculum, primary emphasis should be placed upon; also rank from 1 to 5 or more, 1 being the most important:

76. a. Knowledge (know).

	SA	A	N	D	SD	$\bar{X}$	σ
I	36	56	9	0	0	4.33	0.65
II	22	56	22	0	0	4.17	0.72
III	50	50	0	0	0	4.46	0.52
IV	100	0	0	0	0	4.75	0.50

81. Rank:

		$\bar{X}$	σ
I	mode = 3	3.28	1.07
II	mode = 2	3.13	1.25
III	mode = 3	2.75	0.86
IV	mode = 1	2.00	0.42

77. b. Outdoor skills (know how).

I	46	46	9	0	0	4.33	0.65
II	44	44	11	0	0	4.42	0.67
III	50	50	0	0	0	4.46	0.52
IV	100	0	0	0	0	4.75	0.50

82. Rank:

I	mode = 2	3.17	1.25
II	mode = 2	2.64	1.00
III	mode = 1	3.06	1.34
IV	mode = 2	1.20	0.45

78. c. Attitude (know how to be).

I	100	0	0	0	0	5.00	0.00
II	78	22	0	0	0	4.83	0.39
III	83	17	0	0	0	4.79	0.43
IV	100	0	0	0	0	5.00	0.00

83. Rank:

I	mode = 1	1.17	0.38
II	mode = 1	1.67	1.29
III	mode = 2	2.06	1.44
IV	mode = 1	2.80	0.84

79. d. Affective domain.

I	36	36	27	0	0	4.08	0.79
II	22	67	0	11	0	4.08	0.79
III	54	46	0	0	0	4.46	0.52
IV	100	0	0	0	0	5.00	0.00

84. Rank:

I	mode = 3	3.28	1.23
II	mode = 4	3.50	1.31
III	mode = 1	2.93	1.58
IV	mode = 5	1.50	0.71

Table 11.--Continued.

80. e. Methodology of instruction

	SA	A	N	D	SD	$\bar{X}$	σ
I	27	46	27	0	0	4.08	0.79
II	11	78	0	11	0	4.00	0.74
III	36	64	0	0	0	4.33	0.49
IV	50	50	0	0	0	4.50	0.71

Dans un curriculum en éducation Plein-Air, l'emphase principale devrait être placée sur les points suivants; aussi les classer par ordre de priorité, 1 étant le plus important:

Rang:

- *a. connaissances (savoir).* ☐
- *b. habiletés de Plein-Air (savoir faire).* ☐
- *c. attitudes (savoir être).* ☐
- *d. domaine affectif.* ☐
- *e. méthodologie d'instruction.* ☐

The role of the teacher in Outdoor Education in public schools should be: also rank each of the following from 1 to 5 or more, 1 being the most important:

86. a. Teaching

I	17	83	0	0	0	4.23	0.44
II	64	27	0	0	9	4.43	0.90
III	92	8	0	0	0	4.87	0.35
IV	50	50	0	0	0	4.00	0.82

87. b. Leadership

I	67	25	0	0	8	4.42	1.13
II	70	30	0	0	0	4.77	0.44
III	77	23	0	0	0	4.67	0.49
IV	100	0	0	0	0	4.25	0.96

88. c. Administration

I	8	50	25	17	0	3.54	0.88
II	20	50	33	0	0	3.69	0.85
III	23	46	8	23	0	3.73	1.03
IV	50	50	0	0	0	4.00	0.82

85. Rank:

		$\bar{X}$	σ
I	mode = 5	4.11	1.08
II	mode = 4	3.23	1.74
III	mode = 3	3.40	1.50
IV	mode = 3	3.50	0.71

92. Rank:

I	mode = 3	2.58	0.84
II	mode = 2	2.25	0.68
III	mode = 1	1.69	1.35
IV	mode = 2	2.75	1.55

93. Rank:

I	mode = 1	1.53	1.12
II	mode = 1	1.44	1.09
III	mode = 2	2.44	0.81
IV	mode = 1	1.75	1.50

94. Rank:

I	mode = 5	4.79	0.98
II	mode = 5	4.47	1.19
III	mode = 5	4.94	1.00
IV	mode = 1	3.50	2.38

Table 11.--Continued.

89. d. Evaluation.

	SA	A	N	D	SD	$\overline{X}$	σ
I	17	67	8	8	0	4.00	0.82
II	9	64	18	9	0	3.71	0.91
III	54	38	8	0	0	4.40	0.63
IV	50	50	0	0	0	4.00	0.82

95. Rank:

I mode = 5
II mode = 4
III mode = 4
IV mode = 3

90. e. Public relations agent.

	SA	A	N	D	SD	$\overline{X}$	σ
I	8	33	33	17	8	3.17	1.00
II	0	54	27	0	18	3.14	1.21
III	23	62	15	0	0	4.07	0.59
IV	50	50	0	0	0	4.00	0.82

96. Rank:

I mode = 5
II mode = 5
III mode = 5
IV mode = 2

91. f. "Catalysing" agent.

	SA	A	N	D	SD	$\overline{X}$	σ
I	30	60	10	0	0	4.18	0.60
II	18	64	18	0	0	3.93	0.62
III	58	33	8	0	0	4.50	0.65
IV	50	50	0	0	0	4.50	0.71

97. Rank:

I mode = 2
II mode = 3
III mode = 2
IV mode = 4

Les tâches de l'éducateur de Plein-Air dans nos écoles devraient être les suivantes; aussi classer par ordre de priorité, 1 étant la plus importante:[a]

	Rang:
a. enseignement.	☐
b. animation.	☐
c. administration.	☐
d. évaluation.	☐
e. agent de relations publiques.	☐
f. agent "catalyseur".	☐

---

[a] Group I = Quebec, Group II = Canada, Group III = U.S.A., Group IV = overseas.

Statement 82: In an Outdoor Education curriculum, primary emphasis should be placed upon; also rank from 1 to 5 or more, 1 being the most important:

Rank:

a. Knowledge (know). ☐
b. Outdoor skills (know how). ☐
c. Attitude (know how to be). ☐
d. Affective domain. ☐
e. Methodology of instruction. ☐

Dans un curriculum en éducation Plein-Air, l'emphase principale devrait être placée sur les points suivants; aussi les classer par ordre de priorité, 1 étant le plus important:

Rang:

a. connaissances (savoir). ☐
b. habiletés de Plein-Air (savoir faire). ☐
c. attitudes (savoir être). ☐
d. domaine affectif. ☐
e. méthodologie d'instruction. ☐

The emphasis on outdoor skills in an Outdoor Education curriculum has been evaluated fairly strongly by the overseas and Canadian samples; however, outdoor skills were ranked second to attitudes by Quebec and the U.S.A. groups.

Additional comments pertaining to Statement 82:

QUEBEC

I:18 (e) adaptability.

I:13 Others: Behavior.

I:1 Behavior.

II:17 *Méthodologie d'animation.*

CANADA

I:16 *Pour la formation des maîtres du premier cycle universitaire.*

I:13 What is difference between (c) and (d)?

I:17 Should not be ranked.

I:4 To know is basic for skills and attitudes, but when all is said and done, to know is really least important.

U.S.A.

I:11 Ways of teaching the environmental curriculum.

I:19 I do not believe they should be ranked since the relative importance varies with the individual learner and the situation.

I:12 To teach!!! To be trained, skilled in teaching others.

I:17 Processes (experiences).

II:20 Attitude is a result of others.

OVERSEAS

I:2 Others: Safety.

I:1 No individual aspect should be stressed more than the others.

Statement 90: The role of the teacher in Outdoor Education in public schools should be; also rank each of the following from 1 to 5 or more, 1 being the most important: Rank:

a. Teaching. ☐
b. Leadership. ☐
c. Administration. ☐
d. Evaluation. ☐
e. Public relations agent. ☐
f. "Catalysing" agent. ☐

Les tâches de l'éducateur de Plein-Air dans nos écoles devraient être les suivantes; aussi classer par ordre de priorité, 1 étant la plus importante: Rang:

a. enseignement. ☐
b. animation. ☐
c. administration. ☐
d. évaluation. ☐
e. agent de relations publiques. ☐
f. agent "catalyseur." ☐

An ANOVA analysis illustrated a difference among the four groups at a .041 level of significance, but there was no pairwise difference output through the Tukey HSD procedure.

The American group ranked the strongest agreement in terms of means and standard deviations ($\overline{X}$=4.07, σ=0.59); on the other hand, the tightest consensus came from overseas (σ=.59). The Canadian respondents showed an heterogeneous opinion (σ=1.21) with 33% undecided or neutral.

Statement 91: (b) catalysing agent.
agent catalyseur.

A difference significant at the .031 level was found between the subsets (II, I, IV) and (I, IV, III), which can be interpreted as a difference between the American and the Canadian respondents. The Canadians reported the weakest agreement ($\overline{X}$=3.93), while the U.S.A. group rated the strongest agreement ($\overline{X}$=4.50).

Additional comments pertaining to Statements 90 and 91:

QUEBEC

I:27 *Cela dèpend beaucoup du contexte du milieu de travail.*

I:25 *(f) Catalyseur.*

I:15 Administration and public relation agent should be the concern of other school services or departments.

I:13 *Le meilleur agent, c'est l'élève!*

I:11 *(f) Facilitateur.*

I:5 *Il doit être avant tout un animateur. Je changerais le terme enseignement par "pédagogue." L'administration ne le concerne pas.*

II:5 *Pour moi, le domaine affectif comprend le "savoir être," appréciation, attitudes, et intérêts.*

I:1 Self-renewal, capacity, creativity, imagination.

Conscience des dangers inhérents aux activités en milieux naturels.

II:26 *Enseignement: de la façon d'utiliser le cadre Plein-Air pour diverses activités physiques ou culturelles.*

CANADA

I:16 *Ici on suppose qu'il y a un besoin de "spécialiste" dans chaque école qui enseigne le Plein-Air. J'ai de la difficulté à supporter cette hypothèse.*

I:8 (f) "Catalysing agent" is part of a "teaching" role.

I:7 Should not be ranked!

I:6 (f) personal commitment.

I:5 It depends on age level. K-3 pupils: no emphasis on identification type of knowledge but know how to feel about green magic.

I:4 By leadership, I would include example. This would be most important.

U.S.A.

I:21 (a) teaching (facilitating learning).

I:20 These are all essential roles if the job is to get done.

I:17 We feel that most of the important roles for the teacher are not included in the above. We present below a list we feel more meaningful.
    a. organizer (planning, logistics)
    b. facilitator
    c. participant--observer
    d. reviewer (extender).

I:11 I don't like the title "the Outdoor Education teacher." Rather use teacher-leader of Outdoor Education experiences.

The results of Statements 75-97 regarding "Teacher Education, Curriculum, and EPA/OE" are summarized in Table 12, through

Table 12.--Results of Phase II responses to Part V: Teacher education, curriculum and EPA/OE--
Quebec, Canada, U.S.A., and overseas.

	Quebec		Canada		U.S.A.		Overseas							Tukey subsets**	
Stmt.	X		X		X		X		MS_b	MS_e	df	F	Fpr.	A	B
75	4.68	0.48	4.93	0.26	4.75	0.45	4.80	0.45	0.181	0.173	3,51	1.045	.381		
76	4.33	0.65	4.17	0.72	4.46	0.52	4.75	0.50	0.399	0.386	3,37	1.032	.390		
77	4.33	0.65	4.42	0.67	4.46	0.52	4.75	0.50	0.177	0.366	3,37	0.485	.695		
78	5.00	0.00	4.83	0.39	4.79	0.43	5.00	0.00	0.122	0.105	3,37	1.123	.352		
79	4.08	0.79	4.08	0.79	4.46	0.52	5.00	0.00	0.790	0.487	3,35	1.622	.202		
80	4.08	0.79	4.00	0.74	4.33	0.49	4.50	0.71	0.323	0.473	3,34	0.683	.569		
81	3.28	1.07	3.13	1.25	2.75	0.86	2.00	1.42	2.527	1.206	3,50	2.094	.113		
82	3.17	1.25	2.64	1.00	3.06	1.34	1.20	0.45	5.553	1.376	3,44	4.035	.012*	4,2	2,3,1
83	1.17	0.38	1.67	1.29	2.06	1.44	2.80	0.84	2.340	1.191	3,50	1.965	.131		
84	3.28	1.23	3.50	1.31	2.93	1.58	1.50	0.71	2.637	1.861	3,43	1.417	.251		
85	4.11	1.08	3.23	1.74	3.40	1.50	3.50	0.71	2.354	2.004	3,44	1.175	.330		
86	4.03	0.44	4.43	0.90	4.87	0.35	4.00	0.82	1.336	0.511	3,42	2.614	.064		
87	4.42	1.13	4.77	0.44	4.67	0.49	4.25	0.96	0.392	0.576	3,41	0.682	.568		
88	3.54	0.88	3.69	0.85	3.73	1.03	4.00	0.82	0.237	0.852	3,41	0.278	.841		
89	4.00	0.82	3.71	0.91	4.40	0.63	4.00	0.82	1.152	0.629	3,42	1.829	.157		
90	3.17	1.11	3.14	1.21	4.07	0.59	4.00	0.82	2.961	0.983	3,41	3.012	.041*	2,1,4,3	
91	4.18	0.60	3.93	0.62	4.50	0.65	4.50	0.71	0.819	0.393	3,37	2.083	.119		
92	2.58	0.84	2.25	0.68	1.69	1.35	2.75	1.55	2.702	1.055	3,51	2.561	.065		
93	1.53	1.12	1.44	1.09	2.44	0.81	1.75	1.50	3.340	1.046	3,51	3.192	.031*	2,1,4	1,4,3
94	4.79	0.98	4.47	1.19	4.94	1.00	3.50	2.38	2.495	1.376	3,50	1.813	.157		
95	4.05	1.22	4.13	0.74	3.69	1.30	3.50	0.58	1.116	1.103	3,47	1.012	.396		
96	4.74	1.48	5.18	1.25	4.73	0.88	4.00	1.41	1.426	1.610	3,45	0.888	.455		
97	3.00	1.66	3.00	1.36	2.33	1.11	3.25	0.96	1.754	1.913	2,45	0.917	.440		

*$p \leq .05$.

**Subsets for which members within the subset do not differ in mean level of agreement. Groups in separate subsets differ at $p \leq .05$.

the mean, standard deviation, the mean square between groups (MS_b), the mean square error (MS_e), the degrees of freedom (df), the F-ratio, the F-probability, and the group subsets (expressed by .05 level of significance or less) resulting from the Tukey post hoc analysis.

Summary

The information gathered through questionnaires served as a base for the study. The results were organized according to the basic elements identified in five parts:

Part I: Definitions of EPA/OE
Part II: Objectives of EPA/OE
Part III: Social and Cultural Environments of EPA/OE
Part IV: Learning and EPA/OE
Part V: OE Teacher Curriculum.

In step one, the adjusted frequencies, means, and standard deviations of responses were computed for each rationale statement by group (see Tables 3, 5, 7, 9, and 11) and part. The means ($\overline{X}$) and standard deviations (σ) were plotted on a bar graph in order to lay out similarities, differences and patterns within and between groups (see Charts in Appendix F). Also, the results of means and standard deviations of the Quebec responses were recorded in order to exhibit major differences with each of the other groups: Canada, the U.S.A., and overseas (see Tables 4, 6, 8, 10, and 12). The same analysis of results was done for Phase I of the study. This has been recorded in Appendix G.

The second step undertaken was an analysis of variance with a Tukey post hoc analysis, a procedure for honestly significant differences (HSD), in order to explore pairwise differences between groups of experts and how each group consensus related to Quebec (see Tables 4, 6, 8, 10, and 12).

In the third step, consensus of experts was illustrated by group (Chapter III, p. 43), for each part: definitions of EPA/OE, objectives, social and cultural environments, learning, and OE teacher curriculum.

A summary of consensus for the total population and by group is given (Charts 5-9) to illustrate clearly major similarities and differences concerning each rationale statement evaluated by the experts (Group I=Quebec, Group II=Canada, Group III=U.S.A., Group IV=overseas).

Additional information is provided in Appendix G, where means and standard deviations are plotted in order to demonstrate the items with strong positive ratings (SAR) and high consensus (HC), the most desirable items, and on the other hand, the items with strong negative ratings (SNR) and high consensus (HC) as well, which point out the less desirable items in an OE curriculum.

Bar graphs (Appendix F) illustrate the means and standard deviations of each statement for each group. The researcher has also contrasted Quebec's deviation from each of the other three groups. It would thus be possible for the Quebec respondents to realize that their independent judgments were not that far from the others (see Charts 5-9 and F3-F8).

		Stmt.[a]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Strong Agreement Rating	HC	I			X						X	X	X	X				X											X	X	X	X	X		X
		II		X	X	X		X	X	X		X			X		X	X		X			X						X	X	X		X	X	
		III																	X	X			X						X	X	X	X	X		
		IV	X																									X							
	MC	I	X				X	X	X	X							X		X		X	X	X											X	
		II	X	X	X	X	X				X		X	X	X		X		X		X	X	X									X			
		III		X	X	X	X	X	X	X	X		X		X		X	X			X	X											X		
		IV					X	X	X	X	X		X				X				X	X			X	X	X		X	X	X	X	X	X	
	LC	I																																	
		II																																	
		III																																	
		IV		X	X	X	X						X		X			X	X	X			X												
Moderate Agreement Rating	HC	I																																	
		II														X																			
		III																																	
		IV																																	
	MC	I		X		X										X								X	X	X	X	X							
		II																						X		X		X							
		III												X		X								X											
		IV														X								X											
	LC	I																																	
		II																							X		X								
		III																																	
		IV																																	
Strong Disagreement Rating	HC	I																																	
		II																																	
		III																							X	X	X								
		IV																																	
	MC	I																																	
		II																																	
		III																																	
		IV																																	
	LC	I																																	
		II																																	
		III																																	
		IV																																	

Key: I = Quebec, II = Canada, III = U.S.A., IV = overseas.
HC = High Consensus, MC = Moderate consensus, LC = Low consensus.

[a] See Research Instrument for description of statement (Appendix C).

Chart 5.--Summary of consensus, Part I: Definitions of EPA/OE.

			34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
Strong Agreement Rating	HC	I		X		X						X		X	X	X	X	X
		II		X		X					X				X			
		III		X	X	X						X	X		X			
		IV													X			
	MC	I	X	X	X					X	X	X						
		II	X	X						X		X	X	X		X	X	X
		III		X						X	X			X		X	X	
		IV	X	X		X				X		X		X		X		X
	LC	I																
		II																
		III																
		IV		X							X		X				X	
Moderate Agreement Rating	HC	I																
		II																
		III																
		IV																
	MC	I						X										
		II					X	X	X									
		III						X	X									
		IV					X	X	X									
	LC	I																
		II																
		III																
		IV																
Strong Disagreement Rating	HC	I							X									
		II					X											
		III																
		IV																
	MC	I					X											
		II																
		III																
		IV																
	LC	I																
		II																
		III																
		IV																

Chart 6.--Summary of consensus, Part II: Objectives of EPA/OE.

			51	52	53	54	55	56	57	58	59	60	61
Strong Agreement Rating	HC	I	X		X								
		II											
		III											
		IV											
	MC	I		X		X	X	X		X	X	X	X
		II	X	X	X	X	X	X	X	X	X	X	X
		III	X	X	X	X	X	X	X	X	X		X
		IV	X	X	X	X	X	X	X	X	X		X
	LC	I											
		II											
		III											
		IV											
Moderate Agreement Rating	HC	I											
		II											
		III											
		IV											
	MC	I							X				
		II											
		III									X		
		IV									X		
	LC	I											
		II											
		III											
		IV											
Strong Disagreement Rating	HC	I											
		II											
		III											
		IV											
	MC	I											
		II											
		III											
		IV											
	LC	I											
		II											
		III											
		IV											

Chart 7.--Summary of consensus, Part III: Social and cultural environment and EPA/OE.

			62	63	64	65	66	67	68	69	70	71	72	73	74
Strong Agreement Rating	HC	I		X	X		X	X			X			X	X
		II	X								X	X			X
		III		X											X
		IV		X					X	X	X		X		X
	MC	I	X			X			X	X		X	X		
		II		X	X	X	X	X	X	X			X		
		III	X		X	X	X	X	X	X	X	X	X	X	
		IV													
	LC	I													
		II													
		III													
		IV	X		X		X	X				X		X	
Moderate Agreement Rating	HC	I													
		II													
		III													
		IV													
	MC	I													
		II													
		III													
		IV													
	LC	I													
		II													
		III													
		IV													
Strong Disagreement Rating	HC	I													
		II													
		III													
		IV													
	MC	I													
		II													
		III													
		IV													
	LC	I													
		II													
		III													
		IV													

Chart 8.--Summary of consensus, Part IV: Learning and EPA/OE.

			75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97
Strong Agreement Rating	HC	I	X			X								X											
		II	X			X									X										
		III	X			X		X						X	X										
		IV			X	X	X																		
	MC	I		X	X		X	X	X				X		X	X	X		X			X			
		II		X	X		X	X						X		X	X		X			X			
		III		X	X		X									X	X	X	X			X			
		IV						X					X			X	X	X	X						X
	LC	I																							
		II										X													
		III																							
		IV																				X			
Moderate Agreement Rating	HC	I																							
		II																							
		III																							
		IV																							
	MC	I								X		X								X					
		II								X								X		X					
		III							X												X				
		IV									X														
	LC	I																							
		II							X				X												
		III								X	X	X								X					
		IV							X											X	X				
Strong Disagreement Rating	HC	I									X														
		II																							
		III																							
		IV								X											X				
	MC	I																			X				
		II																							
		III																							
		IV										X													
	LC	I																							
		II									X														
		III																							
		IV																							

Chart 9.--Summary of consensus, Part V: Outdoor Education teacher curriculum.

Even though it is not the intent of the writer to extend the results of Delphi I in the study, it might be of some interest to the reader to see how the panel of experts scored in Phase I in comparison with Phase II. Tables 13 to 17 lay out the results of Delphi I and Delphi II as expressed by means and standard deviations. The difference between Delphi II and Delphi I (II-I) is given in order to show any movement toward agreement or disagreement.

Table 13.--Summary results and differences between Delphi I and Delphi II (I+II and II-I): Part I.

Stmt.		I		II		I+II		II-I	
		$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ
1[a]	I	2.50	2.12	4.00	0.87	3.84	1.07		
	II	3.35	1.32	3.86	0.95	3.58	1.18	-3.07	1.53
	III	3.69	1.20	3.94	0.77	3.81	1.00	-2.33	1.41
	IV	4.00	0.00	4.25	0.50	4.13	0.35	-4.00	0.90
2	I	1.00	0.00	3.19	1.33	2.94	1.43		
	II	3.29	1.40	3.50	1.02	3.39	1.23	0.60	2.64
	III	3.13	1.45	3.88	0.62	3.50	1.16	0.00	2.87
	IV	3.00	1.83	4.00	1.41	3.50	1.60	0.00	3.60
3	I	3.00	2.83	4.53	0.51	4.37	0.96		
	II	3.65	1.37	4.07	0.83	3.84	1.16	-1.87	1.30
	III	3.31	1.54	3.75	0.77	3.53	1.22	-0.56	1.51
	IV	3.50	1.00	3.75	1.26	3.63	1.06	0.67	1.15
4	I	1.00	0.00	3.06	1.12	2.83	1.25		
	II	3.24	1.25	3.50	0.76	3.35	1.05	-2.40	1.24
	III	2.88	1.40	3.56	0.81	3.22	1.18	-1.89	1.16
	IV	3.75	1.26	4.00	1.41	3.87	1.25	-2.67	1.53
5	I	1.50	0.71	3.24	1.30	3.05	1.35		
	II	3.65	1.22	4.14	0.86	3.87	1.09		
	III	3.63	1.31	4.00	0.97	3.81	1.15		
	IV	4.00	1.41	4.25	1.50	4.13	1.36		
6	I	3.56	1.33	3.68	0.99	3.59	1.19	-0.53	1.59
	II	4.28	1.23	4.50	0.63	4.38	0.99	-0.50	0.79
	III	4.04	1.36	4.24	0.90	4.13	1.18	-0.20	1.26
	IV	4.50	0.04	4.60	0.55	4.55	0.69	-0.25	0.96
7	I	3.12	1.42	3.68	1.06	3.36	1.29	0.44	2.03
	II	4.00	0.97	4.25	0.58	4.12	0.81	-0.43	1.22
	III	3.92	1.14	4.06	0.83	3.97	1.01	-0.44	0.73
	IV	3.80	0.84	3.40	0.89	3.60	0.84	-0.33	1.53
8	I	3.60	1.25	3.58	0.90	3.59	1.13	-0.94	1.29
	II	4.17	1.29	4.50	0.52	4.32	1.01	-0.29	1.54
	III	4.50	0.88	4.29	0.92	4.41	0.89	-0.81	0.83
	IV	4.33	0.82	4.60	0.55	4.45	0.69	-1.00	1.41
9	I	3.92	1.19	4.11	0.66	4.00	0.99	-1.00	1.67
	II	3.78	1.00	4.07	0.79	3.91	0.91	-0.43	1.02
	III	3.83	0.96	4.12	0.86	3.95	0.92	-0.38	0.96
	IV	3.33	1.51	4.00	1.22	3.64	1.36	0.50	0.73
10	I	3.80	1.19	4.11	0.47	3.93	0.96	-0.69	1.58
	II	4.24	0.83	4.31	0.48	4.27	0.67	0.00	0.96
	III	4.21	1.06	4.12	0.86	4.17	0.97	-0.25	1.34
	IV	3.50	1.05	3.40	1.14	3.45	1.04	0.75	0.96
11	I	3.73	1.25	4.11	0.66	3.89	1.05	0.00	1.37
	II	3.94	1.30	3.56	0.96	3.76	1.15	0.47	1.36
	III	3.29	1.33	3.47	0.87	3.37	1.16	0.88	1.45
	IV	3.83	0.98	4.00	1.22	3.91	1.04	0.80	1.10
12	I	3.54	1.30	3.68	0.58	3.60	1.05	-0.11	1.59
	II	3.35	1.22	3.94	1.09	3.39	1.14	0.73	1.33
	III	2.92	1.28	2.24	0.75	2.63	1.13	1.00	1.66
	IV	3.67	1.03	3.40	0.89	3.55	0.93	0.00	1.00
13	I	3.12	1.48	3.37	1.01	3.22	1.29	0.42	1.92
	II	3.89	1.18	3.63	0.81	3.76	1.02	0.50	1.21
	III	3.92	1.32	3.38	0.96	3.40	1.17	0.82	1.24
	IV	4.00	1.26	4.00	1.41	4.00	1.26	0.60	0.89
14	I	2.23	1.45	2.22	1.26	2.28	1.36	2.00	1.63
	II	2.89	1.49	2.81	1.05	2.85	1.28	1.07	1.28
	III	2.65	1.15	2.24	1.03	2.48	1.11	1.50	1.41
	IV	2.08	1.30	3.00	1.41	2.91	1.23	1.00	2.58
15	I	3.28	1.28	3.39	0.92	3.33	1.13	0.89	1.13
	II	4.28	0.67	4.07	0.88	4.18	0.77	0.06	0.85
	III	3.96	1.07	4.00	0.79	3.98	0.95	0.06	1.39
	IV	3.50	0.84	3.60	1.14	3.55	0.93	0.00	1.22
16	I	4.12	1.07	4.26	0.45	4.18	0.86	-0.11	1.19
	II	4.33	0.84	4.19	0.54	4.26	0.71	-0.81	1.17
	III	4.38	0.80	4.31	0.60	4.35	0.72	-0.58	0.88
	IV	3.80	1.64	3.50	1.73	3.67	1.58	1.00	1.41

Table 13.--Continued.

Stmt.		I		II		I+II		II-I	
		$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ
17	I	4.31	0.93	4.26	0.73	4.29	0.84	-0.58	1.12
	II	4.28	0.81	4.38	0.62	4.32	0.73	-0.88	1.59
	III	.18	0.79	4.44	0.51	4.29	0.68	-1.94	1.14
	IV	3.60	1.45	3.50	1.73	3.56	1.74	0.25	1.89
18	I	3.67	1.33	4.48	0.77	4.36	0.90	-2.00	.
	II	4.38	0.92	4.33	0.61	4.36	0.78	-0.75	0.77
	III	4.50	0.76	4.47	0.51	[illegible]	0.63	-0.67	1.00
	IV	4.40	1.34	4.25	1.50	4.31	1.32	0.25	0.50
19	I	3.71	1.17	3.79	0.71	3.24	1.11	-1.39	1.63
	II	4.24	0.83	4.00	1.03	4.12	0.93	-1.37	1.05
	III	4.21	0.88	4.18	0.73	4.19	0.81	-1.76	1.39
	IV	3.80	1.94	3.73	1.89	3.76	1.84	-0.25	2.50
20	I	3.85	1.12	3.89	0.81	3.87	0.99	-0.44	1.46
	II	3.72	1.23	3.44	0.81	3.59	1.05	0.33	1.59
	III	3.58	1.32	3.59	1.06	3.59	1.20	0.41	1.00
	IV	3.17	0.75	3.40	1.14	3.27	0.90	0.60	0.89
21	I	4.23	0.83	4.22	0.75	4.27	0.78	0.11	0.94
	II	3.88	1.22	3.94	0.68	3.91	0.98	0.77	1.39
	III	3.83	1.34	4.25	0.61	4.05	1.12	0.44	1.32
	IV	3.67	1.51	3.40	1.52	3.55	1.44	0.00	0.00
22	I	1.59	1.29	2.27	1.15	1.87	1.12	2.55	1.22
	II	2.61	1.29	2.29	1.05	2.41	1.13	1.88	1.58
	III	2.13	1.06	1.94	0.83	2.03	0.97	1.27	1.00
	IV	2.33	0.82	2.40	0.99	2.36	0.81	0.71	1.50
23	I	2.04	1.48	1.84	1.07	1.96	1.31	2.17	1.57
	II	2.09	1.41	2.07	1.67	2.01	1.49	2.29	1.73
	III	2.08	1.02	1.53	0.62	1.85	0.91	2.24	1.25
	IV	4.20	[illegible]	4.00	0.71	4.10	0.57	-0.31	1.53
24	I	2.00	1.41	2.05	1.03	2.00	1.26	1.63	1.46
	II	1.88	1.31	1.80	1.39	1.84	1.27	2.24	1.55
	III	2.18	1.22	1.73	0.62	1.98	1.05	1.84	1.62
	IV	4.20	0.45	4.00	0.71	4.10	0.57	-1.00	1.73
25	I	2.15	1.44	2.26	1.16	2.23	1.33	1.76	1.43
	II	2.06	1.24	1.93	1.39	2.27	1.27	[illegible]	[illegible]
	III	1.18	1.22	1.33	0.62	1.05	1.38	1.06	1.68
	IV	4.20	0.71	[illegible]	0.43	4.37	0.57	-1.25	0.96
26	I	2.04	1.34	2.06	1.16	2.05	1.26	2.05	1.31
	II	2.06	1.34	1.80	1.15	[illegible]	1.24	1.87	1.36
	III	2.27	1.19	1.53	0.62	1.92	1.04	1.94	1.57
	IV	4.20	1.43	4.20	0.45	4.20	0.42	-1.25	1.26
27	I	4.44	0.87	4.58	0.51	4.50	0.73	-1.33	1.65
	II	4.44	1.21	4.87	0.34	4.66	0.90	-2.20	1.66
	III	4.00	1.19	4.47	0.51	4.21	0.98	-2.31	1.20
	IV	4.17	0.75	4.20	0.84	4.18	0.75	-1.80	1.10
28	I	3.91	1.32	4.39	0.50	4.12	1.07	-2.17	2.04
	II	4.63	0.92	4.87	0.34	4.75	0.62	-2.60	2.13
	III	4.09	1.08	4.47	0.51	4.25	0.90	-2.76	0.83
	IV	4.17	0.75	4.20	0.84	4.18	0.75	-3.20	1.30
29	I	3.64	1.35	4.06	0.43	3.83	1.08	-1.86	1.96
	II	4.38	0.89	4.69	0.48	4.53	0.72	-2.60	1.92
	III	4.04	1.09	4.41	0.51	4.21	0.89	-2.81	0.83
	IV	4.20	0.84	4.20	0.84	4.20	0.79	-0.20	1.30
30	I	3.16	1.52	3.76	0.66	3.43	1.27	-1.24	1.93
	II	4.23	0.93	4.44	0.63	4.34	0.79	-2.33	2.16
	III	4.05	1.09	4.41	0.51	4.21	0.89	-2.81	0.83
	IV	4.17	0.75	4.20	0.84	4.18	0.75	0.00	1.00
31	I	4.32	0.85	4.42	0.61	4.36	0.75	-2.47	1.23
	II	4.73	0.46	4.81	0.40	4.77	0.43	-3.07	0.92
	III	4.36	0.95	4.35	0.61	4.36	0.81	-2.73	1.22
	IV	4.33	0.84	4.20	0.84	4.36	0.51	-0.20	0.54
32	I	3.60	1.32	3.63	0.81	3.61	1.11	1.11	1.32
	II	3.88	1.05	4.31	0.79	4.09	0.93	1.00	1.33
	III	3.95	0.92	4.20	0.79	3.97	0.85	0.43	1.02
	IV	3.52	0.94	3.80	1.09	3.64	0.92	0.80	0.94
33	I	5.00	0.00	4.11	0.46	4.15	0.49		
	II	3.27	1.21	3.90	1.04	3.56	1.15	1.28	1.41
	III	3.70	1.26	4.06	0.56	3.87	0.92	0.78	0.83
	IV	4.26	1.26	4.00	1.22	4.30	1.18	0.40	1.14

Key: I = Quebec, II = Canada, III = U.S.A., IV = overseas.

[a]See Research Instrument for description of statement.

Table 14.--Summary results and differences between Delphi I and Delphi II (I+II and II-I): Part II.

Stmt.		I		II		I+II		II-I	
		$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ
34	I	3.77	0.99	4.11	0.74	3.91	0.90	0.47	0.90
	II	4.29	0.59	4.25	0.58	4.27	0.57	0.53	0.74
	III	4.48	0.60	4.43	0.51	4.50	0.56	-0.20	1.01
	IV	4.00	0.63	4.00	0.71	4.00	0.63	0.20	0.84
35	I	4.12	0.77	4.16	0.60	4.13	0.69	-0.42	1.02
	II	4.22	0.35	4.38	0.50	4.29	0.52	0.06	0.77
	III	4.21	0.98	4.29	0.59	4.24	0.83	0.00	1.17
	IV	4.17	1.17	4.20	1.30	4.18	0.67	-0.40	1.14
36	I	4.38	0.85	4.16	0.60	4.29	0.76	-0.21	0.92
	II	4.00	0.82	4.07	0.70	4.03	0.75	-0.14	1.10
	III	4.04	0.93	4.12	0.49	4.07	0.79	0.24	1.15
	IV	3.83	1.17	3.60	1.14	3.73	1.10	0.40	0.55
37	I	3.96	1.08	4.37	0.49	4.13	0.89		
	II	4.29	0.77	4.56	0.51	4.42	0.66		
	III	4.21	0.85	4.41	0.51	4.29	0.75		
	IV	4.33	0.52	4.40	0.55	4.36	0.50		
38	I	1.69	1.32	1.63	1.01	4.67	1.19		
	II	1.78	1.06	1.81	1.22	1.79	1.12		
	III	1.79	1.10	1.35	0.49	1.61	0.92		
	IV	2.17	0.75	2.22	0.84	2.18	0.75		
39	I	2.31	1.45	2.32	1.00	2.31	1.26	1.58	1.64
	II	2.56	1.29	2.88	1.09	2.70	1.19	1.63	1.31
	III	2.83	1.35	2.06	0.66	2.51	0.98	1.65	1.06
	IV	2.67	1.33	3.00	1.00	2.82	0.98	1.20	1.64
40	I	1.35	0.35	1.21	0.42	1.29	0.69	2.89	0.81
	II	2.23	[illegible]	2.25	1.18	2.24	1.17	2.07	1.23
	III	2.04	[illegible]	1.88	0.78	1.98	0.91	2.34	0.83
	IV	2.00				2.00	0.00	2.00	1.41
41	I	3.35	1.32	3.42	0.84	3.38	1.13	1.11	1.37
	II	3.65	1.22	3.94	0.57	3,79	0.96	0.50	1.40
	III	4.00	1.10	4.00	0.83	4.02	0.99	0.00	1.12
	IV	4.00	1.10	4.40	0.55	4.18	0.87	-0.80	0.84
42	I	3.96	1.08	3.95	0.85	3.96	0.98	0.42	1.07
	II	4.41	0.62	4.31	0.48	4.36	0.55	0.06	0.68
	III	4.50	0.66	4.59	0.62	4.54	0.64	-0.06	0.75
	IV	3.50	1.64	3.40	1.82	3.45	1.63	1.00	1.87
43	I	4.58	0.70	4.26	0.56	4.44	0.66	-2.84	1.07
	II	4.17	0.79	4.31	0.70	4.24	0.74	-2.38	1.31
	III	4.29	0.91	4.47	0.51	4.37	0.77	-2.82	1.12
	IV	4.33	0.52	4.40	0.56	4.36	0.50	-2.20	0.84
44	I	3.65	1.23	4.05	0.52	3.82	1.01	-1.42	1.92
	II	4.40	0.51	4.31	0.87	4.35	0.71	-1.36	1.15
	III	4.00	1.06	4.29	0.47	4.12	0.87	-1.88	1.27
	IV	3.67	1.51	3.81	1.38	3.73	1.35	-0.06	1.82
45	I	4.15	1.05	4.53	0.51	4.31	0.87	-2.95	1.22
	II	4.23	0.75	4.38	0.88	4.00	0.81	-1.93	1.39
	III	3.88	0.95	4.12	0.60	3.98	0.82	-1.76	1.44
	IV	4.33	0.82	4.40	0.89	4.36	0.81	-2.25	0.96
46	I	4.46	0.88	4.74	0.45	4.63	0.66	-1.38	1.60
	II	4.39	0.85	4.56	0.51	4.47	0.71	-0.44	1.20
	III	4.18	0.90	4.41	0.62	4.28	0.79	0.00	1.07
	IV	4.67	0.52	4.80	0.45	4.73	0.47	-0.40	0.55
47	I	4.34	0.66	4.69	0.48	4.53	0.55	-1.00	1.07
	II	4.41	0.62	4.38	1.02	4.39	0.83	-0.13	0.74
	III	4.18	0.88	4.06	0.83	4.12	0.84	0.40	1.08
	IV	3.67	1.21	4.00	1.00	3.82	1.08	-0.60	1.52

Table 14.--Continued.

Stmt.		I		II		I+II		II-I	
		$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ
48	I	4.67	0.58	4.78	0.45	4.76	0.44		
	II	4.28	0.46	4.27	0.59	4.27	0.52	0.00	0.82
	III	4.50	0.73	4.35	0.70	4.42	0.71	0.33	0.71
	IV	3.67	1.21	3.80	1.30	3.73	1.19	0.60	0.89
49	I	5.00	0.00	4.89	0.32	4.90	0.31		
	II	4.22	0.43	4.20	0.77	4.21	0.60	0.06	0.85
	III	4.44	0.63	4.24	0.66	4.33	0.65	0.00	0.71
	IV	4.00	0.89	4.00	1.00	4.00	0.94	-0.20	0.45
50	I			3.33	1.33	3.33	1.33		
	II	3.45	1.50	3.47	0.74	3.46	1.10	0.80	1.40
	III			3.56	0.73	3.56	0.73		
	IV	3.00		4.00	1.41	3.67	1.15	2.00	

Table 15.--Summary results and differences between Delphi I and Delphi II (I+II and II-I):
Part III.

Stmt.		I		II		I+II		II-I	
		$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ
51	I	4.62	0.50	4.89	0.32	4.73	0.45	0.28	0.57
	II	4.44	0.62	4.44	0.81	4.44	0.70	-0.27	0.96
	III	4.52	0.59	4.53	0.51	4.53	0.55	-0.38	0.80
	IV	4.50	0.55	4.60	0.55	4.25	1.04	-0.60	0.55
52	I	4.36	1.15	4.11	0.88	4.25	1.04	-1.12	1.83
	II	4.11	0.83	3.81	1.11	3.97	0.97	-0.67	1.35
	III	3.65	1.19	4.12	0.86	3.85	1.08	0.00	0.85
	IV	4.33	0.81	4.40	0.89	4.36	0.81	-0.50	0.71
53	I	4.24	0.97	4.21	0.42	4.23	0.77		
	II	4.24	0.56	4.31	0.60	4.27	0.57		
	III	4.18	0.66	4.47	0.80	4.31	0.73		
	IV	3.83	0.41	4.07	0.71	3.90	0.54		
54	I	4.36	1.22	4.05	0.78	4.23	1.05		
	II	4.06	1.03	4.31	0.70	4.18	0.88		
	III	4.00	0.80	4.18	0.53	4.08	0.70		
	IV	4.33	0.82	4.20	0.84	4.27	0.79		
55	I	4.20	1.19	4.33	0.69	4.26	1.00		
	II	4.40	0.51	4.31	0.63	4.36	0.56		
	III	4.09	1.00	4.07	0.88	4.08	0.94		
	IV	3.33	0.58	3.75	0.96	3.57	0.79		
56	I	2.67	2.08	3.61	1.04	3.48	1.21	3.00	
	II	4.40	0.51	4.25	0.62	4.33	0.55	-0.07	0.33
	III	4.25	0.58	4.27	0.88	4.26	0.73	0.11	0.33
	IV	3.50	0.58	3.80	0.84	3.67	0.71	1.00	0.00
57	I	3.50	2.12	3.21	1.03	3.24	1.09	1.00	
	II	3.83	0.99	3.93	0.70	3.88	0.86	0.00	0.82
	III	3.75	1.06	4.24	0.83	4.00	0.97	0.00	0.50
	IV	3.67	0.82	3.60	0.89	3.64	0.81	0.80	0.84
58	I	4.48	0.65	4.53	0.61	4.50	0.63	-0.28	0.67
	II	4.35	0.49	4.13	0.72	4.24	0.61	-0.13	0.74
	III	4.52	0.59	4.59	0.51	4.55	0.55	0.06	0.77
	IV	4.50	0.55	4.60	0.55	4.55	0.52	-0.60	0.89
59	I	3.92	1.29	3.94	0.80	3.93	1.11	0.11	1.33
	II	4.28	0.57	4.31	0.61	4.29	0.58	0.00	0.82
	III	4.39	0.78	4.59	0.62	4.48	0.72	-0.13	0.81
	IV	4.60	0.55	4.60	0.55	4.60	0.52	-0.50	1.29
60	I	4.00	1.73	3.88	0.78	3.90	0.91		
	II	3.94	0.43	3.73	0.70	3.84	0.57	0.42	0.79
	III	3.81	1.11	3.05	0.56	3.84	0.63	-0.11	1.54
	IV	3.50	1.05	3.80	1.30	3.64	1.12	0.25	0.96
61	I			3.94	0.66	3.94	0.66		
	II	4.00	1.00	4.36	0.74	4.24	0.83	-0.20	0.84
	III	4.00		3.94	0.75	3.94	0.73	-1.00	
	IV	4.00		4.50	0.70	4.33	0.58	-1.00	

Table 16.--Summary results and differences between Delphi I and Delphi II (I+II and II-I): Part IV.

Stmt.		I		II		I+II		II-I	
		$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ
62	I	4.12	0.99	3.89	0.88	4.02	0.94	-0.21	1.18
	II	3.56	0.63	3.69	0.48	3.63	0.55	0.20	0.77
	III	3.83	1.13	4.18	0.73	3.98	0.99	0.12	0.93
	IV	3.67	1.50	3.40	1.52	3.55	1.44	0.00	0.00
63	I	4.46	0.99	4.68	0.48	4.56	0.81	0.16	1.07
	II	4.41	0.62	4.25	0.58	4.33	0.60	-0.07	0.88
	III	4.54	0.59	4.76	0.44	4.63	0.54	0.24	0.75
	IV	4.00	1.10	4.00	0.22	4.00	1.10	0.00	0.00
64	I	4.38	0.98	4.58	0.51	4.47	0.81	0.16	1.17
	II	4.24	0.75	3.51	0.60	4.27	0.67	0.07	0,59
	III	3.88	1.19	4.00	0.87	3.92	1.06	-0.12	1.27
	IV	3.67	1.03	3.60	1.14	3.64	1.03	0.00	0.00
65	I	3.77	1.37	4.00	0.67	3.87	1.12	0.21	1.44
	II	3.75	0.77	3.69	0.60	3.72	0.68	0.00	1.11
	III	4.04	0.81	4.00	0.61	4.02	0.72	0.00	0.87
	IV	3.33	1.03	3.20	0.45	3.27	0.79	0.20	0.45
66	I	4.38	0.85	4.68	0.48	4.51	0.73	0.11	0.74
	II	4.47	0.51	4.44	0.51	4.45	0.51	-0.07	0.79
	III	4.18	0.73	4.41	0.51	4.28	0.65	0.12	0.78
	IV	4.00	0.89	3.80	0.84	3.91	0.83	0.00	0.00
67	I	4.35	0.69	4.68	0.48	4.49	0.63	0.26	0.45
	II	4.06	0.56	4.50	0.52	4.27	0.57	0.40	0.63
	III	3.96	1.00	4.06	0.66	4.00	0.87	-0.06	0.83
	IV	3.67	0.52	3.60	0.55	3.64	0.50	0.00	0.00
68	I	4.48	0.77	4.63	9,50	4.54	0.66	0.06	0.73
	II	4.29	0.69	4.38	0.81	4.33	0.74	0.07	0.96
	III	3.96	0.91	4.06	0.75	4.00	0.84	0.12	0.99
	IV	4.33	0.52	4.40	0.55	4.36	0.50	0.20	0.45
69	I	4.42	0.76	4.50	0.63	4.45	0.71	0.06	0.93
	II	4.07	0.70	4.36	0.50	4.20	0.62	0.15	0.89
	III	4.36	0.90	4.31	0.60	4.34	0.78	-0.21	0.70
	IV	4.50	0.55	4.60	0.55	4.54	0.52	0.00	0.00
70	I	5.00	0.00	4.65	0.49	4.67	0.49	0.00	0.00
	II	3.50	0.55	4.13	0.50	3.95	0.58	0.50	1.05
	III	4.47	0.61	4.25	0.68	4.37	0.65	-0.23	0.60
	IV	4.40	0.55	4.60	0.55	4.50	0.53	0.20	0.45
71	I			4.31	0.60	4.31	0.60		
	II	3.57	0.53	4.13	0.50	3.96	0.56	0.57	0.79
	III	4.47	0.61	4.18	0.64	4.33	0.63	-0.36	0.63
	IV	3.80	1.64	4.00	1.22	3.90	1.37	0.20	2.49
72	I	4.58	0.50	4.37	0.76	4.49	0.63	-0.21	0.92
	II	4.41	0.51	4.31	0.70	4.36	0.60	-0.07	0.70
	III	4.80	0.41	4.47	0.51	4.63	0.49	-0.44	0.53
	IV	4.50	0.55	4.40	0.55	4.45	0.52	0.00	0.00
73	I	4.52	0.71	4.60	0.48	4.59	0.62	0.00	0.59
	II	4.11	0.68	4.47	0.74	4.27	0.72	0.33	0.62
	III	4.25	0.50	4.47	0.51	4.43	0.51	0.00	0.00
	IV	4.04	1.10	4.20	0.84	4.09	0.94	0.21	0.45
74	I	4.38	0.65	4.68	0.48	4.56	0.56	0.38	0.52
	II	4.50	0.67	4.73	0.46	4.61	0.61	0.27	0.79
	III	5.00	0.00	4.77	0.44	4.80	0.41	-0.50	0.71
	IV	4.17	0.75	4.40	0.55	4.27	0.65	0.00	0.00

Table 17.--Summary results and differences between Delphi I and Delphi II (I+II and II-I): Part V.

Stmt.		I		II		I+II		II-I	
		$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ
75	I	4.69	0.47	4.68	0.48	4.69	0.47	0.00	0.47
	II	4.68	0.33	4.93	0.26	4.91	0.30	0.00	0.39
	III	4.73	0.63	4.75	0.45	4.74	0.55	0.14	0.86
	IV	4.67	0.52	4.80	0.45	4.73	0.47	0.00	0.00
76	I	4.31	0.68	4.33	0.65	4.32	0.66	0.17	0.83
	II	4.20	0.68	4.17	0.72	4.19	0.68	-0.10	0.57
	III	4.33	0.66	4.46	0.52	4.38	0.60	0.18	0.75
	IV	4.00	1.72	4.75	0.50	4.33	1.00	0.75	1.50
77	I	4.38	0.70	4.33	0.65	4.37	0.67	0.00	0.60
	II	4.14	0.66	4.42	0.67	4.27	0.67	0.10	0.57
	III	4.43	0.60	4.46	0.52	4.44	0.56	0.09	0.70
	IV	4.40	0.89	4.75	0.50	4.56	0.73	0.51	1.00
78	I	4.81	0.40	5.00	0.00	4.47	0.34	0.17	0.39
	II	4.57	0.65	4.83	0.39	4.69	0.55	0.00	0.47
	III	4.62	0.59	4.79	0.43	4.69	0.53	0.33	0.89
	IV	4.75	0.50	5.00	0.00	4.86	0.38	0.33	0.58
79	I			4.08	0.79	4.08	0.79		
	II	4.17	0.75	4.08	0.79	4.11	0.75	-0.25	0.50
	III	2.59	1.12	4.46	0.52	3.50	1.30	1.50	1.51
	IV	5.00		5.00	0.00	5.00	0.00	0.00	
80	I			4.08	0.79	4.03	0.79		
	II	4.00	0.93	4.00	0.74	4.00	0.79	-0.50	0.58
	III	2.77	1.03	4.33	0.49	3.41	1.15	1.44	1.67
	IV	3.00		4.50	0.71	4.00	1.00	1.00	
81	I	2.15	0.78	3.28	1.07				
	II	3.25	1.00	3.13	1.25				
	III	1.74	1.10	2.75	0.86				
	IV	2.83	1.60	2.00	1.42				
82	I	2.31	0.55	3.17	1.25	2.61			
	II	2.38	0.89	2.64	1.00				
	III	2.60	1.14	3.06	1.34				
	IV	2.00	1.22	1.20	0.45				
83	I	1.38	0.75	1.17	0.38				
	II	1.87	1.25	1.67	1.29				
	III	3.85	1.53	2.06	1.44				
	IV	1.50	0.55	2.80	0.84				
84	I	3.40	1.34	3.28	1.23				
	II	2.57	1.51	3.50	1.31				
	III	4.56	0.63	2.93	1.58				
	IV	1.00		1.50	0.71				
85	I	5.00		4.11	1.08				
	II	2.33	1.63	3.23	1.74				
	III	3.75	0.86	3.40	1.50				
	IV	3.00		3.50	0.71				
86	I	4.08	1.26	4.23	0.44	4.13	1.04	0.17	1.27
	II	4.36	0.50	4.43	0.90	4.39	0.83	-0.18	1.08
	III	4.37	0.50	4.87	0.35	4.59	0.50	0.46	1.52
	IV	4.00	0.71	4.00	0.82	4.00	0.71	0.00	0.00
87	I	4.46	0.71	4.42	1.13	4.46	0.85	0.00	1.41
	II	4.60	0.51	4.77	0.44	4.68	0.48	0.00	0.47
	III	4.21	0.42	4.67	0.49	4.41	0.50	0.31	0.48
	IV	4.40	0.89	4.25	0.96	4.33	0.87	0.00	0.00
88	I	3.20	1.50	3.54	0.88	3.32	1.32	0.67	1.03
	II	3.93	0.47	3.69	0.85	3.81	0.68	0.00	0.67
	III	3.51	1.50	3.73	1.03	3.63	1.12	0.67	2.08
	IV	3.50	0.58	4.00	0.82	3.75	0.71	0.00	0.00

Table 17.--Continued.

Stmt.		I		II		I+II		II-I	
		$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ	$\bar{X}$	σ
89	I	3.77	1.21	4.00	0.82	3.85	1.09	-0.08	1.04
	II	4.07	0.62	3.71	0.91	3.89	0.79	-0.27	1.01
	III	2.05	1.47	4.40	0.63	3.03	1.66	2.07	1.86
	IV	3.80	0.45	4.00	0.82	3.89	0.60	0.25	0.50
90	I	3.33	1.52	3.17	1.11	3.78	1.39	-0.17	1.47
	II	3.60	0.63	3.14	1.21	3.78	0.98	-0.73	1.56
	III	2.15	1.31	4.07	0.59	2.97	1.42	1.79	1.76
	IV	3.80	0.45	4.00	0.82	3.89	0.60	0.25	0.50
91	I	3.00	2.83	4.18	0.60	4.00	1.08		
	II	4.50	0.55	3.93	0.62	4.10	0.64	-0.60	0.89
	III	4.18	1.01	4.50	0.65	4.32	0.87	0.36	0.92
	IV	1.00		4.50	0.71	3.33	2.08	3.00	
92	I	2.25	1.15	2.58	0.84	2.40	1.03	0.47	0.94
	II	2.21	1.12	2.25	0.68	2.23	0.90	0.07	1.00
	III	3.15	1.27	1.69	1.35	2.50	1.48	-1.57	1.99
	IV	2.60	1.52	2.75	1.55	2.67	1.41	0.25	0.50
93	I	1.80	1.15	1.53	1.12	1.68	1.09	-0.06	0.42
	II	1.73	0.88	1.44	1.09	1.58	0.99	-0.21	1.05
	III	3.50	1.15	2.44	0.81	3.03	1.13	-1.14	1.23
	IV	1.20	0.45	1.75	1.50	1.44	1.01	0.50	1.73
94	I	4.13	0.95	4.79	0.98	4.42	1.01	0.59	1.28
	II	4.00	0.24	4.47	1.19	4.24	1.21	0.58	1.00
	III	5.00	0.82	4.94	1.00	4.95	0.94	-1.00	1.00
	IV	4.00	1.41	3.50	2.38	3.75	1.83	-1.00	1.73
95	I	3.17	1.09	4.05	1.22	3.56	1.22	0.94	1.39
	II	3.00	1.07	4.13	0.74	3.57	1.07	0.92	1.19
	III	3.00	0.82	3.69	1.30	3.55	1.23	0.67	2.08
	IV	3.60	0.89	3.50	0.58	3.56	0.73	0.00	0.00
96	I	4.30	1.11	4.74	1.48	4.50	1.29	0.35	1.27
	II	4.20	0.94	5.18	1.25	4.62	1.17	1.10	1.66
	III	4.25	0.50	4.73	0.88	4.63	0.83	0.67	0.58
	IV	3.20	1.10	4.00	1.41	3.56	1.24	0.25	0.58
97	I	2.00	1.41	3.00	1.66	2.81	1.63	1.00	1.41
	II	2.80	2.05	3.00	1.36	2.94	0.51	1.00	1.00
	III	3.50	3.54	2.33	1.11	2.47	1.42	-2.00	2.83
	IV			3.25	0.96	3.25	0.96		

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

In this concluding chapter, an interpretation of study results which explored Outdoor Education trends in Quebec, Canada, the U.S.A., and overseas is made. It contains a summary of basic elements (definitions, objectives, social and cultural environments, learning processes, and teacher education), and a set of recommendations for the Outdoor Education program at Laval University. Suggestions for future research are also included.

The summary focuses on major differences among groups concerning the basic elements of OE as related to Quebec. The discussion focuses on participants' support or opposition to the suggested rationale elements, and the implications of the study for Outdoor Education curriculum at Laval University.

Elements of the rationale are summarized according to the degree of response strength and consensus among experts found on Charts G1A to G4E, Appendix G. There is a brief summary statement for each of the areas covered (definitions, objectives, social and cultural environments, learning processes, and teacher education). It is not the writer's intent to treat each of the statements in depth, but rather to analyze major differences which appear to be significant for the purpose of this study.

Summary of Basic Elements of EPA/OE by Part

As suggested in Chapter III, the results of the consensus have been expressed as follows: (a) according to the level of consensus--high consensus (between $\sigma=0$ and $\sigma=.66$, HC), moderate consensus (MC, with σ between 0.67 and 1.32), and low consensus (LC) with σ of 1.33 or greater; (b) according to the response strength and valence:[1] strong disagreement ratings (SDR), $\bar{X}=0$ to 1.66, moderate opinion (MO) from 1.67 to 3.32, and strong agreement ratings (SAR), $\bar{X}=3.33$ to 5.00.

In this instance, the summary will be conducted from strong agreement ratings (SAR) to strong disagreement ratings (SDR) and from high consensus (HC) to low consensus (LC) (see Design, p. 43).

Part I: Definitions of EPA/OE

A quick look at the charts of Chapter IV representing the group consensus among the four groups on the definitions of EPA/OE revealed the following patterns.

Only one group showed a strong disagreement rating (SDR) for definitions presented. Statements 23, 24, and 25 reference to EPA/OE as a subject matter provoked a SDR with high consensus among American respondents. On the other hand, the overseas group expressed a strong agreement rating (SAR) with a moderate consensus

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[1] A weighting factor has been given to level of agreement of the means as follows: SD=1, D=2, N=3, A=4, SA=5.

(MC) for the same three statements. Canada rated MO-LC and Quebec MO-MC.[2]

This would suggest that the Quebecois have a conception of EPA/OE which is half-way between overseas and the U.S.A. concerning the concepts stated in Statements 23, 24, and 25.

This indication of significant difference, placing Quebec in a middle-range position between the overseas group and the American group, is reinforced by the results of Statements 27 to 30, concerning EPA/OE as a multi-disciplinary learning process. Indeed, as indicated in Table 3 and also in Table 4, by the following subsets (III, I, II), (IV), overseas affirms a clear difference from the three other groups of experts (at a .000 level of significance).

One of the expert opinions coming from England mentioned that in Europe the term Outdoor Education was largely redundant with Environmental Education, and there is, and should be, a move toward meaning education according to its specific topic and content:

> I would say that Outdoor Education, as a generic term, would be understood to refer to activities such as undertaken by Boy Scouts, canoeing clubs, Outward Bound schools (survival in the outdoors) [sic] and other physical pursuits in the country-side [Appendix A2].

The same respondent mentioned, "Outdoor Education does not in itself postulate any philosophy or knowledge base" (Appendix A2).

On the other hand, an expert from Quebec defined EPA/OE as: Education through the outdoors, which is instrumental in the learning process, and also education for and about the outdoors, relating to attitude and also a certain body of knowledge particular to Outdoor Education (translated from Appendix A2: Personal Definitions of EPA/OE as Given by Experts During Phase I [Quebecois, Canadian, American, and overseas experts]).

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[2] From Phase I to Phase II, the Quebec opinion moved from a moderate position (MO), low consensus (LC) to a MO, moderate consensus (see Table 13, p. 111). The same significant difference (at .007) was found in Phase I of the study.

Another important difference between Quebec and the overseas group of respondents is stated in Table 4, p. 66. In investigation of the concept of a subject matter orientation at different school curriculum levels, the results of the means of Quebec for Statements 23, 24, and 25 show a decreasing emphasis on EPA/OE as a multi-disciplinary learning process as the child goes from elementary level to college level.[3] The same phenomenon is observed in the degree of disagreement ratings of Table 3, p. 49.

In comparison with the Americans (MO with all statements, 23-25) and Canadians(25% strongly agreed to EPA/OE being a subject matter at the elementary level), Quebec indicated an "in between" rating concerning EPA/OE as a subject matter versus a multi-disciplinary learning process. However, the overall majority (Table 3) in all groups declared a clear option for EPA/OE as a process.

Part II: Objectives

A major aspect evinced by Part II in the study is the strong disagreement, even on the part of the Quebec group, concerning the objectives of EPA/OE as related to physical education in Statements 38-40.

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[3] Elementary grades (1 to 6) $\overline{X}=4.48$, at secondary (grades 7 to 12) $\overline{X}=4.39$, and college level $\overline{X}=4.06$, as per Table 3.

The Canadian group suggests an emphasis on physical activities in the outdoors. On the other hand, Quebec response to Statement 48 suggests, with a mean of 4.78, objectives dealing with the affective domain.

The following objective, "provide an opportunity for 'relief' from the boredom, drudgery and routine of many learning and teaching situations," received the highest rating ($\bar{X}$=4.89) among all the objectives suggested and with the highest consensus as well (σ=.32).

Part III: Social and Cultural Environments

Most of the ratings expressed in Part III concerning the social and cultural values as related to EPA/OE received a strong agreement rating (SAR) with moderate consensus. The exceptions are noted below.

Quebec reached a high consensus on the social values as communicated through the statement, "urbanization has deprived children of close contact with the land." This result suggests that Quebec's EPA/OE should provide EPA/OE opportunities in close contact with nature in order to compensate for the artificiality of the urban environment.

The Quebec respondents agreed more strongly than any other group on the premise that automation and mechanization have dulled creative energy of many young people. This suggests that modern society has increased the need for mental and physical fitness and for regaining contact with the basic realities found in nature. However, the Quebec group (like the U.S.A. and overseas) showed only moderate opinion on the assumption that a free public education for all children is important in society, and the fact that the school should act as an agent for fostering the development of the individual to his fullest potential as well as for fostering democratic values and passing on cultural heritage.

The results of the investigation suggest that EPA/OE may be based on the following social and cultural assumptions.[4] Modern society has increased the need for mental and physical health. Also, urbanization has deprived children of close contact with the land. The natural environmental setting constitutes a "relief" for the individual who often cannot, in his everyday life, find relaxation and peace (see Table 7).

Part IV: Learning and EPA/OE

The results of Part IV of this study (Chart 8) indicated some common beliefs regarding the learning processes, the nature of the child, and EPA/OE as suggested in Statements 62-74. An overall consensus favored the multi-sensory approach to EPA/OE.

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[4] A priority among statements was made according to the following in order to determine an average score for each response:

$$\frac{X_1 n_1 + X_2 n_2 + X_3 n_3 + X_4 n_4}{N}$$

Part V: EPA/OE and Teacher Curriculum

In comparison of modes, attitudes ranked first by all groups except the U.S.A., skills ranked first in emphasis by the U.S.A., and second by the other three groups. Knowledge ranked first with the overseas group, second with the Canadians, and third by the U.S.A. and Quebec. Affective domain was a primary emphasis among the American sample. The Quebec sample felt that the affective domain should be third in emphasis at the same level as knowledge, both following attitudes and skills.

The least emphasis, according to the overall score of modes, was upon the methodology of instruction. The overseas sample ranked it third, after attitude, knowledge, and skills (see Table 11).

The Quebec group coincided with the overall results. Concerning the role of the future OE leaders, the desirability of leadership was pointed out by all groups (mode = 1) except the American sample, which had teaching as the primary role. Teaching took the second place in ranking by two of the groups; the U.S.A. and Quebec ranked it third after leadership and catalysing agent. This role of catalysing agent was third in the total sample, but the overseas group felt it should be ranked last, after leadership, teaching, public relations, and evaluation. Amazingly enough, the overseas sample ranked leadership and administration first.

Evolution of the Concept: EPA/OE in Quebec--Discussion

The conception of EPA/OE in Quebec proved to have been influenced by two major movements, the European movement (mostly French) and the American movement.

The European Movement

Because of its French cultural heritage, Quebec has been significantly affected by the overseas influences in the field of education as well as in EPA/OE.

A survey of OE programs in Quebec schools by Cousineau in 1971 mentioned that in all the outdoor experiences reported in the survey, none was of Quebec origin.[5]

It seems that Quebec postulates an "imported" EPA philosophy. Indeed, the *Rapport Parent* in 1964 recommended that the French EPA *Mi-Temps Pédagogique et Mi-Temps Sportif*, and in 1970, *Le Tiers Temps Pédagogique*, as experienced in France (*Ecole de Vanves*) by Dr. Max Fourastier, *Académie de Médecine*, be implemented in Quebec.[6] Academic subject matter areas were compressed into the morning hours (8:30-12:30) in order to keep the afternoon for *une sieste*, for sport and one hour of directed study. Children studied obtained superior academic results to the control group, and also, their anthropometric report recorded a remarkable physical development within a year or two.[7]

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[5] J. C. Cousineau, *Profil du Plein Air Pédagogique dans les Ecoles du Québec*, L'Université d'Ottawa 1972, p. 11.

[6] Gouvernement de Québec, Rapport de la Commission Royale d'Enquête, *Situation de l'Enseignement dans les Ecoles du Québec*, Québec, 1964, p. 168.

The recommendations related to physical education were as follows: "*Il nous semble qu'on doit accorder un minimum de deux heures par semaine d'éducation physique et un temps au moins égal à la phase de libre participation.*"[4]

The Rapport Parent continued, "*aussi le professeur d'éducation physiques pour l'ensemble de l'élémentaire et du secondaire devra comporter des activités appartenant à chacune des six grandes familles suivantes:*

1. *gymnastique,*
2. *jeux et sports,*
3. *activités de Plein Air: excursions, ski, patinage, qui développe l'endurance, l'amour de l'air, du soleil, du froid, et de la nature en général,*
4. *activités aquatiques,*
5. *activités de combat,*
6. *activités rythmiques.*

Does Education Plein-Air = Outdoor Education?--As one might realize, originally the EPA/OE in Quebec was closely related to physical education. EPA was viewed as being within physical education. In some instances, it was called *Education Physique "Plein-Air,"* or *les activités physiques de Plein-Air*, or *les activités de Loisirs de Plein-Air*, *Loisirs de Plein-Air*,

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[3] *Parent, Rapport*, Tome II, p. 169.

[4] *Rapport de la Commission Royale d'Enquête*, p. 168.

Récréologie, or *Plein-Air Fédéré*.[5] These focused heavily on sport and recreational activities.[6]

In 1972, Quebec had outdoor sports included in their school programs in 20% of the elementary schools, 40% of the secondary level schools, and 65% at the college level, in which the PE teacher was responsible for at least 60% of the "*journées de Plein-Air*."[7]

From the results of this study, Quebec experts still demonstrated this emphasis on outdoor activities and sports. However, an important move in the evolution of the concepts of EPA/OE has been recognized through the results as well. To the definition of EPA/OE as physical activities in which the individual gets in direct contact with the natural environment, the majority (78%) of the Quebec respondents disagreed (47%) or strongly disagreed (29%). Six percent were undecided, and only 18% felt they could agree (6%) or strongly agree (12%).

The American Influence

On the other hand, the results of the study demonstrated clearly that the conception of EPA/OE in Quebec is shifting toward the curriculum approach. Indeed, the definition of EPA/OE which ranked first in the Quebec sample was "Education through the Outdoors," with a mean of 4.53 and a standard deviation of .51.

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[5] As perceived by the Quebec Sport Federations, which refer more to outdoor sports and activities (*Plein-Air Para-Scolaire*) than EPA (*Plein-Air Pédagogique*).

[6] *Cousineau*, *Profil*, p. 54.

[7] *Gouvernement du Québec* (MEQ), *Service de la Jeunesse du Loisir et du Plein-Air du HCJLS*, *Développement de Loisir de Plein-Air*, no. 3, Annexe 1:19.

This implies that the Quebec concept may have moved toward a broader concept, cutting across subject matters other than physical education. This is expressed very clearly through the Quebec sample's very strong approval on the statement defining EPA/OE as a multi-disciplinary learning process (Statements 27-30), at the elementary level ($\overline{X}$=4.48, σ=0.51), the secondary level ($\overline{X}$=4.39, σ=0.50), the college level ($\overline{X}$=4.06, σ=0.43), and at the adult education level ($\overline{X}$=3.76, σ=0.66).

This conclusion is reinforced by the high degree of disagreement regarding EPA/OE as a subject matter (statements 23-26). A mean response of 1.84 expressed this opinion, although the responses were still fairly diverse, σ=1.07-1.16; Table 5). Even in Phase I of the study, the degree of disagreement was at an $\overline{X}$ of 2.07 and a σ of 1.48 for the subject matter definition.

This may imply that a definite American influence came into Quebec to "scholarize" the traditional *Plein-Air Québecois*. Many such affinities were demonstrated throughout the study between the Quebec trend and EPA/OE as known in the U.S.A.

The American influence in the domain of EPA/OE has not gone unnoticed in Quebec. This effect indeed has been observed a great deal, especially within the last few years (Appendix A, Quebec 1:28).

As a result of this study, the researcher has interpreted the overall picture of the Quebec EPA/OE to be a blending of the two following concepts: education *for* and *about* the outdoors, including attitude development and outdoor skills and knowledge; and also learning *through* the outdoors as a process for curriculum enrichment in which the outdoors are seen as a unique setting for achieving educational objectives *outside* the classroom.

Thus, the answer to the original question, does Education Plein-Air equal Outdoor Education, appears to be yes, *but* with a special body of knowledge and emphasis on outdoor skills. This, of course, would imply a drastic change in the Laval teacher training curriculum in order to integrate an inter-disciplinary approach to all subject matters, particularly at the elementary level.

Recommendations for the Outdoor Education Curriculum at Laval University

From the amount of data collected from the panel of experts selected around the world, many common inferences can be drawn concerning a curriculum in Outdoor Education. The patterns of findings[8] (see Appendix G) among experts' consensus suggest the following recommendations.

Outdoor Education in Quebec

Outdoor Education in Quebec should be considered, on one hand, as

1. *A multi-disciplinary learning process* at the elementary, secondary and college levels; *a means of curriculum enrichment* in a

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[8] In spite of some differences among groups of experts concerning some of the issues in OE, some common clusters or patterns in responses invite common and universal bases for learning in the outdoors.

setting that enhances learning and provides for direct experiences and the opportunity for solving real-life problems; and *a direct approach to exploration and learning* which expedites maximum utilization of the natural physical environment as a learning laboratory which is living and unique. *And on the other hand* as as learning process that offers opportunities for *direct experiences in the acquisition of lifetime skills* promoting a creative and refreshing way of life.

2. OE should also be regarded as learning *through* the outdoors in a process which cuts across the school curriculum offerings, through physical education, natural sciences, social sciences, and many other subject matters and as those experiences which involve enjoying, interpreting, and wisely using the natural environment in achieving, at least in part, the objectives of education (this subject is explored further later in this chapter).

However, Outdoor Education should not be considered as

1. a subject matter for any level of school curriculum,

or as

2. relating only to physical education. Outdoor Education should be seen as a learning process that cuts across *all* school curriculum offerings.

Objectives of the OE Curriculum at Laval University

As ranked by experts through the results of a "mean rank" of the overall population, *the objectives of the OE program* at Laval should be the following:

1. to provide the individual with unique opportunities to develop his creativity and his initiative,

2. to provide a meaningful setting for the development of the affective domain,

3. to develop awareness, appreciation and understanding of the natural environment and man's relation to it,

4. to help realize the full potential of the individual toward optimum development of the mind, body and spirit,

5. to provide a context for the child's socialization to occur by giving him additional opportunities for social group life,

6. to enable students to develop new (outdoor) skills and interests, and provide a basis for a lifetime of meaningful living,

7. to help to use wisely and protect and natural environment,

8. to provide outdoor settings that will make teaching more creative,

9. to provide unique opportunities for behavioral changes because of the particular setting offered by the out-of-doors,

10. to contribute to establish better relations between teachers and students through direct outdoor experiences,

11. to provide an opportunity for direct learning experiences which foster implementation of the school curriculum in many areas, and finally,

12. to utilize surroundings and community resources for education to the best advantage of the curriculum.

Social and Cultural Values

Regarding social and cultural values, the OE curriculum should be based on the following premises:

1. A free public education for all children is important in society, and the school should act as an agent for fostering democratic values and passing on the cultural heritage.

2. In any social setting, man has the need to live peaceably with others and with nature, and to develop tolerance, self-reliance, and understanding.

3. Urbanization has deprived children of close contact with the land.

4. Automation and mechanization have dulled creative energy in many young people.

5. Modern society has increased the need for mental and physical fitness.

6. There is a widespread lack of knowledge and appreciation and skill for participation in meaningful outdoor experiences.

7. Experiences of outdoor living can develop an appreciation for the life style of native inhabitants, colonists, and explorers of the land.

8. The natural environment setting constitutes a "relief" for the individual who often cannot, in his every day life, find relaxation and peace.

9. There has been an increase in interest and use of the outdoors for relaxation and stabilization of body and mind.

Learning and EPA/OE

Apropos to the learning process and EPA/OE, the following should be taken into account:

1. The outdoors can be approached through discovery, exploration, adventure, and research in which there is intense interest in activities that are natural to children and problem solving is used in the context of natural settings.

2. Develop the self-concept of the individual through all kinds of outdoor settings demanding continuous adaptations.

3. Most children and youth can be described as tending to be adventurous, exploratory minded, active, energetic, and curious.

4. The multi-sensory approach of tasting, looking, smelling, hearing, and touching provides direct learning experience that can be used in the out-of-doors.

5. There is an "open/free" atmosphere in outdoor experiences in which teacher-pupil rapport develops and allows students to become actively involved in planning with the teacher for learning experiences.

6. Man is a part of nature and continuous with nature. His flexibility and adaptability permit him to survive in widely differing environments, both physical and cultural. In many cases, humans have to re-learn how to live in a natural versus artificial environment.

7. Students can become actively involved in planning for outdoor learning experiences; this may increase student-teacher rapport.

8. Most children possess a natural yearning for the active outdoor life and respond readily and happily to it.

Teacher Education and EPA/OE

The emphases in the Outdoor Education program as related to teacher training should be placed upon (in order):

1. Attitudes.
2. Skills.
3. Knowledge.
4. Affective domain.
5. Methodology of instruction.

The results of the Quebec sample regarding the emphases of the Outdoor Education program coincided with the mean rank of the overall sample.

The competencies of the OE teacher in the Quebec public schools should be (in order):

1. Leadership.
2. Teaching.
3. Catalysing agent.
4. Evaluation.
5. Administration.
6. Public relations agent.

The definition of EPA/OE as "Learning through the Outdoors" was deemed more desirable by the Quebec group ($\overline{X}$=4.53, σ=.51) than by the Americans ($\overline{X}$=3.75, σ=0.77). The majority agreement was found in Quebec respondents (SA=50%, A=50%).

Learning processes offering opportunities for direct experiences in the acquisition of positive attitudes reflecting harmony of man and nature brought majority agreement as well. The major portion of the Quebec sample felt that sound concepts and knowledge concerning human and natural resources, and lifetime skills permitting a creative and refreshing way of living, should be at almost the same level of emphasis; slightly more was given to the knowledge aspect.

Suggestions for Further Research

The research reveals several areas that could benefit from further study. These are listed below as a series of questions.

1. What would be the opinion of a larger sample of teachers and administrators dealing directly with EPA/OE programs in Quebec schools concerning the basic rationale elements as compared to the results of this study's experts?

2. Would a similar survey of universities, other than Laval, in Quebec record the same results concerning the type of professional preparation needed in EPA/OE?

3. What are the governmental policies and funding levels for EPA/OE in Quebec?

4. Would the educational environment be equally conducive to EPA/OE at all grade levels?

5. What is the availability of human resources related to professional preparation for EPA/OE through established institutions?

6. What types of backgrounds do the people involved in EPA/OE have? Are they new to the field? Where do their qualifications come from? Are they self-taught? What percentage have been trained through European institutions? Canadian institutions? American institutions?

7. Would cross-validation or a longitudinal study verify the results obtained in this study as related to the rationale elements researched?

8. Do Quebec schools show a desire for EPA/OE teachers? Would a sample within the Quebec school system (teachers) bring results similar to those found in this study among experts and leaders in OE?

9. Would the competencies suggested here answer the need of school systems related to EPA/OE?

10. What leadership would be provided by teachers, administrators, and professional associations to issues of professional preparation in OE?

11. Do the opinions of the participating sample in this study accurately reflect the real trends in OE in their countries?

12. What are the opinions of non-educators, school board members, and students on the role of the EPA/OE leader?

13. What are the opinions of teacher education personnel on the role of OE leaders in Quebec and teacher training? How do those opinions compare with the opinions expressed in the present study?

14. What inter-relatedness do participants in the current study see between the basic rationale elements suggested in the study?

APPENDICES

APPENDIX A

A1--PERSONAL COMMENTS AND MODIFICATIONS AS GIVEN BY EXPERTS DURING PHASE I

A2--PERSONAL DEFINITIONS AS GIVEN BY EXPERTS DURING PHASE I

APPENDIX A1

PERSONAL COMMENTS AND MODIFICATIONS AS GIVEN BY EXPERTS DURING PHASE I

PART I: DEFINITION OF OUTDOOR EDUCATION

PARTIE I: DEFINITION DE L'EDUCATION PLEIN-AIR

Stmt. 1. **Learning in the Outdoors.***
*L'apprentissage dans le Plein-Air.**

QUEBEC

1:23* Outdoor Education is incomplete unless it provides multiple opportunities for learning in, for, through and about the out-of-doors. Outdoor education is a curriculum supplement that facilitates and enhances the learning process and sharpens perception. Through it may be demonstrated the fundamental inter-relationship of many curriculum offerings (art, science, language, sports, social studies, etc.) which are too often taught in complete isolation from one another.

I:19 *Apprentissage* is not learning/education.

II:26 *...l'apprentissage (à quelque chose) dans le Plein-Air. Comment évaluer si je ne sais pas le genre d'apprentissage poursuivi.*

II:17 *définition partielle.*

II:5 *Je ne suis pas d'accord avec la définition de Plein-Air définie ici comme un milieu physique en dehors de la classe. Si Plein-Air était équivalent à pleine nature, je serais fortement d'accord avec l'énoncé.*

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*Comments made by experts have been assigned the following taxonomy: The first numeral (Roman numeral) indicates the phase of the Delphi in which it was made, Phase I or II; the second number refers to the expert who made the comment.

CANADA

I:16 *Comme conséquence d'être dans le milieu Plein-Air.*

I:23 partial.

I:21 learning in the natural environment.

I:20 Such is only a setting, not substantive as program medium or as a technique (D).*

Stmt. 2. Learning for the Outdoors.

L'apprentissage pour le Plein-Air.

QUEBEC

II:17 *définition partielle.*

II:5 *J'aurais peur que le tout soit centré sur les moyens de déplacement; en education le moyen ne doit jamais être la fin.*

U.S.A.

I:23 Partial.

II:20 This is semantics--could be in behalf of quality environment, but it is not really for the outdoors (A).**

Stmt. 3. Learning through the Outdoors

L'apprentissage par le Plein-Air

QUEBEC

II:17 *Définition partielle.*

---

*Disagree

**Agree

II:5 *A la condition que l'on place l'individu dans un milieu authentiquement naturel et non seulement en dehors de la classe* (A).

CANADA

I:8 I will see this as the same as #1.

U.S.A.

I:23 Partial.

II:20 If we are talking methodology only, which I am not (D).

Stmt. 4. Learning about the Outdoors.

L'apprentissage au sujet du Plein-Air

QUEBEC

II:17 *Définition partielle.*

II:13 *Au sujet=d'après...?*

II:5 *L'activité devient et le moyen et la fin.*

I:16 *...des milieux Plein-Air.*

I:8 ...Not necessarily part of Outdoor Education, e.g., conservation education can be learned in the classroom.

U.S.A.

I:23 Partial.

Stmt. 5. Learning in and for the Outdoors.
L'apprentissage dans et pour le Plein-Air.

QUEBEC

II:17 *Définition partielle.*

II:12 *Deux concepts?*

II:10 *Traduction de "Outdoor" par le "Plein-Air?"*

CANADA

I:8 Children can learn in the outdoors but at the time they are there, their learning might be directed toward another objective.

U.S.A.

I:23 Partial.

Stmt. 6. Learning in, for, through and about the Outdoors.
Apprentissage dans, pour, par et au sujet du Plein-Air.

QUEBEC

I:20 *Apprentissage par le Plein-Air.*

I:17 *Education par, pour, et au sujet du Plein Air.*

I:8 *"Au sujet de": expression trop vague; à l'élémentaire il ne faudrait pas trop d'emphase sur "about the outdoors" car ceci en sera conséquence.*

I:5 *Parce que un vrai Plein-Air équivaut à une façon de vivre. Ce n'est pas extérieur par opposition à intérieur.*

II:20 *Apprentissage dans et par le Plein-Air.*

II:17 *Me semble couvrir l'ensemble de l'éducation Plein-Air; "au sujet" n'était pas sur le questionnaire 1.*

II:13 *Trop totalitaire*

CANADA

I:8 May be mutually exclusive.

I:18 The objectives of education?

I:4 Good one.

Stmt. 6. **Any physical or recreational activity that actively brings the learner and the natural environment in close contact providing a deeper understanding and appreciation of the natural environment.**

Toute activité physique ou récréative qui met celui qui apprend et l'environnement naturel en rapport étroit en lui fournissant une meilleure compréhension et appréciation de l'environnement naturel.

QUEBEC

I:23 ...may provide....

I:19 *...qui met l'apprenant en rapport étroit en lui....*

I:18 *Cet énoncé s'inscrirait plus comme une définition de l'acte Plein-Air qu'un concept éducatif en soi.*

I:11 Any activity that..."physical or recreational" *est trop limitatif.*

I:6 If added to the statement: "of the natural environment and of himself."

I:5 *Pour moi, il n'est pas ici question de l'éducation Plein-Air, mais bien d'une définition de l'activité Plein-Air.*

II:20 *Toute activité physique et/ou éducative et/ou récréative....*

II:17 *Définition partielle.*

II:11 *Trop restrictif. Acceptable en partie seulement.*

II:6 "And of himself."

II:3 *Tout activité physique, récréative, ou éducative qui par le principe de immersion totale en milieu naturelle, suscite une*

II:12 *Complexe!*

II:10 *Le mot "outdoor" en anglais n'a rien à voir avec le mot "Plein Air" en francais.*

CANADA

I:8 Individually considered, yes, but not necessarily at the same time.

U.S.A.

I:11 Outdoor Education is primarily a means rather than an end.

I:9 Learning in and for are interpreted as including through and about.

Stmt. 7. Curriculum supplement that facilitates and enhances learning/teaching.

Une méthode d'enseignement qui facilite et enrichit l'apprentissage.

QUEBEC

I:27 *La nature devient un milieu stimulant à l'apprentissage.*

I:24 *Un complément...*

I:18 *Un moyen...*

I:11 *Un élément inhérent au curriculum.*

I:10 *Une partie de...*

I:9 *Un élément inhérent du curriculum qui par les connaissances et les experiences vécues en Plein-Air, facilite et enrichit l'apprentissage.*

I:6 *Un vécu auquel on réfère dans l'apprentissage.*

I:7 *Partie importante du curriculum sans (être) structuration, evaluation...*

I:5 *Plus qu'un supplément, ce doit être intégré au processus d'apprentissage.*

I:3 *...doit faire partie du curriculum plutôt qu'un supplément.*

II:17 *Définition partielle.*

II:13 *Mon expérience me l'a prouvé à maintes reprises.*

II:12 *Au scolaire, oui! Appuis dans le Plein-Air.*

II:11 *Selon L. B. Sharp, "ce que doit être enseigné en dehors de la classe...."*

II:6 *Mauvais traduction: Le Plein-Air n'est pas une méthode d'enseignement mais un supplément au programme qui facilite et enrichit l'apprentissage.*

CANADA

I:16 *Méthode qui facilite et enrichit l'apprentissage des matières du curriculum scolaire.*

I:12 It is really a service to curriculum. Outdoor Education should not stand by itself.

I:8 Provides a non-threatening atmosphere.

II:11 Not a supplement but an integral part.

U.S.A.

I:16 Utilizing the outdoors to facilitate and enhance learning and teaching.

OVERSEAS

I:2 If used skillfully by the teacher.

Stmt. B. Learning process that cuts across the school curriculum offerings, through physical education, natural sciences, social sciences and many other subject matters.

Un processus d'apprentissage qui fait appel aux matières du curriculum telles que l'éducation physique, les sciences naturelles, les sciences sociales et plusieurs autres matières.

QUEBEC

I:27 *L'environnement naturel comme un contenant plus qu'un contenu par lequel on peut réaliser différents objectifs.*

I:18 *Spécialement en contexte scolaire élémentaire.*

I:17 *Le Plein-Air n'est pas seulement un instrument pour enrichir les procédés éducatifs (processus d'apprentissage) mais est également "but" en ce sens que l'éducation Plein-Air doit absorber le dévelopement d'attitudes, d'appréciation d'habilités dont l'individu aura besoin pour trouver satisfaction dans le Plein-Air.*

I:9 *Processus d'apprentissage pour fait appel aux matières.*

I:6 *Un process d'apprentissage auquel peuvent se rattacher toutes les matières du curriculum. N.B. Le Plein-Air a sa propre valeur; les autres matières s'y rattachent.*

I:18 *Spécialement en contexte scolaire élémentaire.*

I:7 *Peut être une division à part.*

I:5 *Je suis favorable à l'intégration par le Plein-Air.*

II:17 *Définition partielle.*

II:5 *Pour moi, c'est plus que cela, c'est plus q'une matière académique, c'est un façon de vivre.*

II:3 *Curriculum...afin de mieux comprendre les lois de la nature et dans la but consiste à apprendre à vivre en harmonie avec son environnement.*

CANADA

I:17 Cut across the disciplines of the school curriculum reinforcing and integrating the various subject areas.

I:11 But not restricted to school curriculum.

I:4 I like this one. It is a process.

Stmt. 9. **Education in the outdoors as a means of sharpening and deepening most children's learning.**

Une éducation dans le Plein-Air comme moyen d'aviver et d'approfondir l'apprentissage de la plupart des enfants.

QUEBEC

I:26 *L'éducation Plein-Air est un moyen permettant d'approfondir l'apprentissage de tous les enfants--il faudrait définir quel apprentissage.*

I:18 *Dans une démarche d'éveil et de découverte (élémentaire).*

I:6 Education in the outdoors as a means of initiating, sharpening and deepening all children's learning.

I:4 *Enlever "tous les enfants" pour lire "des population scolaires...."*

I:5 *Mais ce n'est pas une définition du Plein-Air, mais bien un moyen d'apprentissage.*

II:17 *Définition partielle.*

II:5 *La façon d'apprendre, si on se fie au recherche récente, réside dans la mise en situation d'enfant dans un environnement académique. La nature n'est-elle pas l'environnement plus dynamique par rapport à des situations toujours changeantes?*

CANADA

I:17 Education in the real world...learning and understanding.

I:11 Not necessarily children only.

I:7 Learning about what?

OVERSEAS

I:1 ...and attitudes toward life and society.

I:2 Can do if teacher continuously wills it, but otherwise it may be largely wasted effort, though some children will benefit from any favourable experience.

Stmt. 10. **As those experiences that involve enjoying, interpreting, and wisely using the natural environment in achieving at least in part, the objectives of education.**

Comme des expériences qui impliquent l'appréciation, l'interprétation et l'utilisation intelligente de l'environnement dans l'atteinte, du moins en partie, des objectifs de l'éducation.

QUEBEC

I:27 *Cette définition n'est qu'une partie de l'éducation Plein-Air.*

I:23 It includes...to achieve....

I:19 *...impliquant l'appréciation, l'interprétation et l'utilization intelligente de l'environnement....*

I:18 *dans une perspective récréative mais non scolaire.*

I:11 *...qui favorisent....*

I:9 *...qui permettent....*

I:8 "*Adéquat*" *au lieu de* "*prudent.*"

I:6 If "at least in part" is deleted and "objectives of education being the self-realization of the child" is added."

I:5 *Enlever "du moins en partie."*

II:20 *Comme un ou des apprentissages qui impliquent....*

II:17 *Définition partielle.*

CANADA

I:8 May be mutually exclusive.

I:18 The objectives of education?

I:4 Good one.

Stmt. 11. Any physical or recreational activity that actively brings the learner and the natural environment in close contact providing a deeper understanding and appreciation of the natural environment.

Toute activité physique ou récréative qui met celui qui apprend et l'environnement naturel en rapport étroit en lui fournissant une meilleure compréhension et appréciation de l'environnement naturel.

QUEBEC

I:23 ...may provide....

I:19 *...qui met l'apprenant en rapport étroit en lui....*

I:18 *Cet énoncé s'inscrirait plus comme une définition de l'acte Plein-Air qu'un concept éducatif en soi.*

I:11 Any activity that ..."physical or recreational" *est trop limitatif.*

I:6 If added to the statement: "of the natural environment and of himself."

I:5 *Pour moi, il n'est pas ici question de l'éducation Plein-Air, mais bien d'une définition de l'activité Plein-Air.*

II:20 *Toute activité physique et/ou éducative et/ou récréative....*

II:17 *Définition partielle.*

II:11 *Trop restrictif. Acceptable en partie seulement.*

II:6 "And of himself."

II:3 *Tout activité physique, récréative, ou éducative qui par le principe de immersion totale en milieu naturelle, suscite une* *meilleure transmission des connaissances, une meilleure compréhension des phénomènes naturelles, et une meilleure appréciation de l'environnement naturel.*

CANADA

I:17 What about the man-made environment?

I:4 Part only: activity oriented.

II:16 *Différence entre "physique" et "récréative?"*

U.S.A.

II:11 Partially.

II:20 But more too.

Stmt. 12. Any activity of structured or non-structured leisure by which an individual gets in contact with elements of nature.

Toute activité de loisir "structurée" ou "non-structuree" par laquelle un individu prend contact avec les éléments de la nature.

QUEBEC

I:27 *Pourrait être la définition de "Récréation de Plein-Air."*

I:21 *Le contact n'implique pas l'utilization rationelle des éléments de la nature.*

I:18 *L'acte Plein-Air implique une relation du "s'éduquant" avec le milieu naturel dans lequel il est momentanément emergé par l'intermédiaire d'une activité physique quelconque.*

I:11 *D'accord, mais il n'y pas que des activités de loisirs.*

II:12 *Définition partielle.*

II:3 *Toute activité structurée ou non-structurée: scolaire et para-scolaire.*

CANADA

I:7 But this must be in sympathy with the principle of wise use, without abuse or mis-use, not just contact.

I:4 Part only. Leisure oriented.

II:16 *Certains contacts sont éducation, d'autres ne le sont pas. Certains contacts ont des effets négatifs sur l'environnement ex. ski alpin, moto-neige, etc.*

U.S.A.

I:15 Many activities are destructive to environment and build bad attitudes.

I:11 Partially.

II:15 Some contacts may be mis-educative.

II:9 The term "leisure" should be changed to recreation.

OVERSEAS

I:2 The benefit is not automatic for 100% of children (A).

Stmt. 13. Any activity with ecological concerns allowing the individual to discover, identify and analyze the natural environment, its constituent elements and interrelating elements with a conservation purpose.

Toute activité à caractère écologique permettant à l'individu de découvrir, d'identifier et d'analyser l'environnement, les éléments qui le constituent et les éléments d'interrelation, et ce, avec un but de conservation.

QUEBEC

I:22 *C'est un autre aspect de Plein-Air.*

I:19 *Activité orientée vers des préoccupations...et leurs interrelations.*

I:18 *Toute activité qui permet de vivre une expérience de vie en nature; en non d'analyser scientifiquement.*

I:12 *...avec un but de conservation....*

I:6 This is only part and result of....

I:4 Explore instead of analyze.

I:5 *"Situation" au lieu de "activite."*

II:17 *Définition partielle.*

II:13 *La conservation doit devenir une conséquence de l'énoncé.*

II:11 *Trop restrictif; en partie seulement*...as one part of O.E.

II:10 *Caractère trop restrictif.*

II:8 *La conservation n'est pas un but unique; il faut umpliquer le point de vue de l'homme aidé dans son épanouisement par l'équilibre naturel.*

II:5 *Il faudrait définir "l'écologie."*

CANADA

I:17 How about the interrelations of man and the environment and his effect upon the environment?

I:7 Conservation is not a good term for some. To "conserve" means to "keep from use" for some.

I:4 Part only. Ecologically oriented.

U.S.A.

I:11 Partially.

II:7 Most "typical outdoor education" activities observed have not met these goals.

OVERSEAS

I:2 With the aid of a specialist in ecology.

Stmt. 14. Physical activities in which the individual, through sports,* gets in direct contact with the natural environment.

Activités physiques dans lesquelles l'individu, par les sports, prend contact direct avec l'environnement naturel.*

QUEBEC

I:26 *Comment définir sports?*

I:23 It may include....

I:21 *Le contact n'implique pas l'utilization rationnelle des éléments de la nature.*

I:18 *Le peintre qui peint en nature prend contact avec l'environnement!*

I:12 *Sports?*

I:11 *Exclure "par les sports."*

I:10 *Enlever "physiques par les sports."*

I:8 *Par les sports: expression qui rend l'assertion trop limitative.*

I:6 This is part of, and a means to.

I:7 Physical activities yes, sports, not necessarily.

I:5 *Je ne sais pas ce que "activités physiques et sports" viennent faire dans une telle définition de l'Education Plein-Air.*

II:26 *Dépend de ce que l'on entend par "sports au sens large."*

II:13 *Même au sens large, je tends vers DF.*

II:10 *...par des activités récréatives.*

II:8 *Personnellement et actuellement, je me situe comme éducateur physique me servant et utilisant le milieu naturel comme milieu plus poussé en vue de l'épanouissement de l'individu.*

II:5. *Si l'on prend sports dans son expression étymologique je ne voit le lien entre vivre harmonieusement avec la nature et le sport.*

CANADA

I:16 *...par l'activité motrice.*

I:8 Can be, yes!

II:16 *"Sport" souvent mesure contre un autre ou unes. Education au Plein-Air est l'anti-thèse de la compétion. Un curriculum scolaire doit inclure sport et Plein-Air.*

U.S.A.

I:15 If not destructive, e.g. snowmobiling off-trail.

I:11 Partially.

Stmt. 15. Curriculum implementation through direct experiences outside the classroom.

Implantation du curriculum à travers des expériences directes en dehors de la classe.

QUEBEC

II:26 *Curriculum comprend les cours normaux de l'enfant!*

II:17 *Définition partielle.*

II:5 *Je n'accepte pas la définition de Plein-Air comme étant une activité en dehors de la classe.*

CANADA

I:18 Replace "implementations" with "enrichment and enhancement."

I:12 It can go either way. Use the outdoors to illustrate a classroom principle; or as a starting point of inquiry.

I:4 Very good.

U.S.A.

1:22 The implementation of learning by means of direct experiences outside the classroom.

Learning process offering opportunities for direct experiences in the acquisition of:

Stmt. 16. a. Sound concepts and knowledge concerning human and natural resources.

Stmt. 17. b. Lifetime skills permitting a creative and refreshing way of living.

Stmt. 18. c. Positive attitudes reflecting harmony of man with nature.

Un processus d'apprentissage offrant des opportunités pour des expériences directes en vue de l'acquisition de:

a. Concepts et connaissances fondamentales concernant les ressources humaines et naturelles.

b. Habilités durables permettant une façon de vivre créatrice et enrichissante.

c. Attitudes positives manifestant une relation harmonieuse de l'homme avec la nature.

QUEBEC

1:27 *Une processus d'apprentissage offrant des opportunités pour la réalisation (1) d'objectifs d'éducation général; (2) d'objectifs d'éducation spécifique.*

1:26 What is a refreshing way of living?

1:22 *C'est un aspect du Plein-Air.*

1:18 *(B) viendrait avant (a), de (b) resulterait (a).*

I:6 (B) add in all circumstances of life, it should have a carry over in city life, home life, school life, etc.

I:5 *Peut être un peu trop centré sur l'activité structurée.*

I:3 *Matière qui fait appel à plusiers sciences (biologie, zoologie...).*

II:17 *Définition partielle.*

II:5 *C'est la définition qui me plaît le plus.*

CANADA

I:18 How about "media" instead of "process?"

I:17 Can you be sure that a program will encourage these attitudes?

I:10 (c) Positive attitude and understanding...man with nature and man with man.

U.S.A.

I:21 (a) Delete "human."

I:15 If science (ecology) is stressed, why not other curriculum areas, especially social science?

I:12 Learning environment instead of process.

OVERSEAS

I:2 (a) With assistance; (b) and (c) Assuming his attitude to life in general is positive and favorable.

I:5 Continuous process.

Stmt. 19. **(As one part of outdoor education), outdoor experiences concerning the sciences of conservation and ecology.**

(Comme une partie de l'éducation Plein-Air), les expériences de Plein-Air traitant des sciences de la conservation et l'écologie.

QUEBEC

I:26 *Je ne comprends pas.*

I:23 Should be part of any program in Outdoor Education.

I:22 *Nous considérons les activités physiques de Plein-Air en Plein-Air.*

I:18 *L'éducation au Plein-Air n'est pas en fonction ou n'a pas comme finalité la connaissance spécifique de l'environnement, mais elle a pour objectif principal d'offrir le développement le plus qualitatif possible chez l'enfant. C'est-à-dire qu'elle s'inscrit dans des démarches d'éveil et de découvertes. L'éducation au Plein-Air favorise une harmonie avec soi-même et conséquemment avec le milieu ambiant.*

I:8 *Certaine ambiguité.*

I:5 *Plein-Air ne peut êtu pris dans le sens de "outdoor" qui se réfère à l'extérieure par opposition à "indoor," intérieure.*

II:17 *Définition partielle.*

II:5 *Il faudrait définir les termes: écologie, conservation.*

U.S.A.

I:16 If science, then why not other subjects as well?

II:7 Most typical Outdoor Education activities fall outside my interpretation of these.

Stmt. 20. **Generic term for any educational program with focus upon natural environment and man's interaction with and in it.**

Un terme générique pour tout programme éducationnel mettant l'accent sur l'environnement naturel et l'interaction de l'homme avec et dans celui-ci.

QUEBEC

I:23 Outdoor education is sometimes used as a....

II:17 *Définition partielle.*

CANADA

I:16 ...*Programs...*"*activité éducative.*"

I:12 Should we not include man-made areas too: plazas, used car lots, cemeteries, etc.

I:8 The natural environment is only one part of it. Outdoor Education should continue to expand its horizons to include the man-made world also.

U.S.A.

I:11 Partially

II:20 Too often considered only a methodology

Stmt. 21. **Direct approach to exploration and learning which expedites maximum utilization of the natural physical environment as a learning laboratory which is living and unique.**

Une approche directe pour l'exploration et l'apprentissage qui active l'utilisation maximumde l'environnement physique, naturel comme un laboratoire d'apprentissage unique et vivant.

QUEBEC

I:26 *Optimum au lieu de maximum.*

I:23 Outdoor Education should include...direct approach through exploration which expedites....

I:18 *...une approche organique....*

I:5 *On se réfère ici à l'intégration des matières et j'y crois.*

II:17 *Définition partielle.*

CANADA

I:11 Does not imply care for the environment.

I:8 Term "natural" restrictive. It should include "man-made environment" also.

II:11 Maximum, no.

U.S.A.

I:16 Utilization of the "outdoor environment as a learning laboratory."

I:15 Wholistic.

Stmt. 22. Physical activities held in the out-of-doors but with health* concerns as the primary goal.

Activités physiques dans le Plein-Air orientées vers des préoccupations de santé physique, comme premier but.

QUEBEC

I:28 *Pour les niveaux secondaires et collégial seulement (AF), pour le niveau élémentaire (A).*

I:23 Outdoor Education may include....

I:21 *Peut être un des objectifs de l'éducation au Plein-Air, pas comme premier but. Le premier but est l'éducation que l'on peut définir comme étant un processus continue qui vise à donner le "savoir," le "savoir faire" et le "savoire être."*

I:11 *Ce but serait spécifique à certains milieux très déterminés.*

I:6 Unless included in the term health, physical and mental.

II:5 *C'est un conséquence directe de la vie en plein nature (D).*

CANADA

I:11 Incomplete and restrictive.

I:8 Physical fitness is a means, not an end.

I:7 Is this health of the user as well as of the environment?

I:4 Certainly not primary.

OVERSEAS

I:1 Depends how "health" is defined.

Outdoor Education is a subject matter oriented toward: (uni-disciplinary approach with specific content other than history and principles of Outdoor Education)

Stmt. 23. a. Elementary (grade 1 to 6).
Stmt. 24. b. Secondary (grade 7 to 12).
Stmt. 25. c. College level.
Stmt. 26. d. Adult education.

L'éducation Plein-Air est considérée comme une matière au niveau: (approche uni-disciplinaire avec contenu spécifique autre que histoire, principes de l'éducation Plein-Air)

a. élémentaire.
b. secondaire.
c. C.E.G.E.P.
d. éducation permanente.

QUEBEC

I:25 *Pas une matière parmi tant d'autres, mais bien la méthode pour servir à l'apprentissage de toutes les autres matières.*

I:21 *Etant un moyen de formation facilitant "l'éduqué et l'éduquant" à cheminer ensemble dans l'atteinte des buts généraux de l'éducation.*

I:11 *Actuellement, cet énoncé ne s'applique pas au Québec, ses politiques de Ministère de l'Education du Québec (MEQ).*

I:8 *Refère à la question 16 (DF) et 17 (DF) comme significant un état possible de la situation actuelle du Plein-Air au Québec.*

I:6 I disagree with the use of subject matter when applied to elementary or secondary.

I:5 *L'éducation Plein-Air, non, mais les activités dites "Plein-Air," oui.*

II:5 *Je crois que tout apprentissage devrait favoriser le vécu car la vie en plein nature devrait favoriser tous les apprentissages. C'est un milieu privilégié pour l'intégration des matières.*

CANADA

I:18 Change (a),(b),(c),(d) to all levels of learning.

I:13 Not my way at all (SD).

I:12 No, an approach, a service.

I:8 Outdoor education's justification lies in being a unifier of curriculum of providing unique approach in education, not merely another subject in the curriculum.

I:5 A methodology of getting subject matter across.

U.S.A.

I:19 It is not so much a subject matter as an enrichment technique.

I:16 No, only the study of "Outdoor Education" principles, history, etc. is content in my view. Outdoor Education should be a process.

I:15 It is not a subject matter.

I:9 It depends entirely on the teacher.

OVERSEAS

I:6 I don't agree it is a subject matter.

Outdoor Education is a multi-disciplinary learning process oriented toward:

Stmt. 27. a. Elementary (grade 1 to 6).
Stmt. 28. b. Secondary (grade 7 to 12).
Stmt. 29. c. College level.
Stmt. 30. d. Adult education.

L'éducation Plein-Air est un processus d'apprentissage multi-disciplinaire, au niveau:

a. élémentaire.
b. secondaire.
c. C.E.G.E.P.
d. éducation permanente.

QUEBEC

I:23 ..:which has an appeal to all ages regardless of academic level and can be adapted to many needs.

I:20 *L'éducation Plein-Air s'inscrit dans un processus....*

I:5 *On pourrait par une vie harmonieuse en Plein-Air y intégrer toutes les facettes de l'app'entissage tant à l'élémentaire qu'au secondaire.*

II:17 *Définition partielle.*

II:5 *Oui, parce-que l'individu est placé dans une environnement dynamique.*

CANADA

I:18 Change (a),(b),(c),(d) to "all levels of learning."

I:8 Outdoor education must become multi-graded as well as multi-disciplinary.

I:4 All levels of education.

II:16 *Education Plein-Air est souvent un processus multi-disciplinaire, "dans certains cas."*

U.S.A.

I:20 All levels, not any single level.

I:19 Toward all ages, pre-school to geriatrics, I agree with all, but disagree with any one separately.

I:18 "As part of Outdoor Education."

I:16 Should be a process.

OVERSEAS

I:2 Can be either subject or multi-disciplinary oriented, preferable to latter if program suitably modified.

Stmt. 31. As a means of curriculum enrichment, in a setting that enhances learning and provides for direct experiences and the opportunity for solving real-life problems. It cuts across the subject matter areas and is best used by the teacher as a planned part of the learning process.

Comme un moyen d'enrichissement du curriculum, dans un milieu qui approfondit l'apprentissage et prévoit des expériences directes et aussi l'opportunité de résoudre des problèmes concrets de la vie. Elle entrecoupe toutes les matières et est mieux utilisée par les professeurs comme une partie planifiée du processus d'apprentissage.

QUÉBEC

I:27 *Elle entre-coupe certaines matières...non toutes.*

I:23 Outdoor Education can be used as....

II:17 *Définition partielle.*

CANADA

I:13 Leave out "enrichment," it is curriculum!

I:5 Not always necessarily planned--may be incidental.

U.S.A.

I:21 As...integral part.

I:16 Enrichment in...outdoor settings that enhance learning and provide for direct experience.

I:15 A planned part of learning process?

I:10 I don't see it as problem solving from the standpoint of environmental problems. To me, that is more appropriate to environmental education.

II:16 "Ideally."

OVERSEAS

I:2 Much can be learned about the "self" when alone. Academic learning needs guidance.

Stmt. 32. (Starting from the basis of "CURRICULUM," as that which happened to a child or learner as opposed to subject matter or content taught),-as a means to implement the curriculum in a way determined by the appropriate content of the moment when and where it provides the best fit for the child's needs and interests.

(Partant sur la base du "CURRICULUM," tel que ce qui s'est passé chez celui qui apprend ou l'enfant par opposition à la matière ou contenu enseigné),- un moyen de mettre en pratique le curriculum, déterminé d'une certaine façon par un contenu adéquat, du moment ou et quand cela convient le mieux pour les intérets et besoins de l'enfant.

QUEBEC

I:24 *Question non significative.*

I:11 *Idéalement. Exigence particulière de programmation i.es. la programmation doit être très rare.*

I:5 *C'est ce qui se passe actuellement au secondaire; j'y crois pour la technique d'activités dite "Plein-Air," mais pas pour* *une éducation Plein-Air qui doit nécessairement englober le dévelopment intégral de l'individu dans un contexte enrichissant qui est la nature.*

II:17 *Définition partielle.*

II:5 *Un moyen de mettre en pratique le curriculum, pout autant que l'on dispose d'un contenu adéquat, et que l'on respect les interêts et les besoins de l'enfant.*

CANADA

I:17 Add "skills and subject development."

I:8 Can become a limit unless the teacher not only plans to use the outdoors but becomes skilled enough in its use to take advantage of teachable moments (18 &19).

U.S.A.

I:16 Not unique to Outdoor Education.

II:16 Yes, but this should be true for all curriculum, not just Outdoor Education.

Stmt. 33. Educational process coming from a series of organized activities being held generally in a natural or semi-natural setting, based on the potential offered by the natural setting and contributing to the physical and psychic development of the individual, increasing his level of awareness of his interrelations with nature, and also capable of modifying his attitudes and behavior toward the natural environment.

Un processus éducatif dérivant d'un ensemble d'activités organisées se déroulant dans la nature basées sur l'exploitation du potentiel offert par le milieu naturel et contribuant au développement de l'individu tant sur le plan physique que psychique, tout en accroissant son degré de conscience de ses inter-relations avec la nature, et susceptibles de modifier ses attitudes et comportements vis-à-vis du milieu naturel.*

QUEBEC

I:23 This statement is true enough but it is too much like a dictionary.

II:17 *Définition partielle.*

II:13 *Au mot "organisées" je tiens compte du but visé par cette étude (éducation en milieu scolaire).*

II:6 Nature.."and other children." Environment..."and others."

CANADA

I:18 Too many different entities in the above statement to evaluate collectively.

I:17 ?

I:20 How about man-made environment?

I:7 As well as learning about one's fellow man through unique encounters in the out-of-doors.

II:4 I am not sure what you mean by psychic. My concern is that we recognize the physical (mentioned), spiritual, mental, and emotional dimensions of an individual personality.

II:8 Don't agree with restriction of natural environment.

II:16 *Du potentiel "pédagogique."*

U.S.A.

I:19 "Organize" is somewhat too limiting and the activities can be quite informal.

II:16 Educational processes.

OVERSEAS

I:2 But it depends on many factors. Personality and physique and the pupil's relationship with the teacher, previous and current experience, e.g., whether he likes or dislikes getting wet and so forth.

Suggestions for Other Statements:

I:6 Furnishes opportunities for the appreciation of the bio-physical relations of man, his environmental component, and the earth that supports them all.

PART II: OBJECTIVES OF OUTDOOR EDUCATION

PARTIE II: OBJECTIFS DE L'EDUCATION PLEIN-AIR

Stmt. 34. **Provide unique opportunities for behavioral changes because of the particular setting offered by the out-of-doors.**

Fournir des occasions uniques pour des changements de comportements à cause de l'environnement particulier qu'offre le Plein-Air.

QUEBEC

I:23 ...to provide unique opportunity for individual behavioural changes within....

I:17 *S'agit-il d'objectifs éducatifs ou pédagogiques?*

I:11 *En désaccord avec l'approche behavioriste (si c'est l'idée ici), mais non pas avec le début de l'énoncé.*

I:6 *Changement d'attitudes qui se traduisent par des changement dans la vie de l'enfant.*

I:4 *Ajouter: "une fois que l'environnement est connu et respecté."*

I:5 *Je serais d'accord pour une approche organique "faire en sorte que"...au lieu de "aides" car il est difficile d'aider quelqu'un qui ne veut pas être aidé.*

II:13 *Supervisé.*

II:5 *Education: changement du comportement (ce qui se voit). Seul l'individu peut changer son propre comportement. Le milieu naturel étant en constant changement, favorise donc des adaptations diversifiantes: conséquences directes des changement du comportement.*

U.S.A.

I:11 Too limiting.

Stmt. 35. **Help to use wisely and protect the natural environment.**

Aider à utiliser judicieusement et protéger l'environnement naturel.

QUEBEC

I:27 *Objectif trop simple et incomplet.*

I:23 Delete: "and improve."

I:21 *L'énergie créatrice existe toujours...moins de chances de l'utiliser.*

I:17 *Contribution à une utilisation juducieuse du milieu naturel.*

II:21 *Jugement de valeur (?)*

II:17 *Objectif de dévelopement.*

CANADA

I:16 And care for the natural environment.

U.S.A.

I:16 This may better describe objectives of conservation.

II:15 I would have to add "improve."

Stmt. 36. **Provide outdoor settings that will make teaching more creative.**

Fournir des situations de Plein-Air qui rendront l'enseignement plus créateur.

QUEBEC

I:26 *Toutes formes d'enseignement....*

I:16 *D'accord dans le sens de plus efficace.*

I:12 *Dépendant du niveau d'enseignement.*

I:6 *Le mot enseignement me répugne.*

I:5 *Ça devrait être une préoccupation actuelle au Québec de favoriser le Plein-Air pour sortir l'étudiant de l'engrenage de "robotisme" qui s'établit de plus en plus dans nos maisons d'enseignement.*

II:13 *A cause de la nécessité de toutes les connaissances et capacités.*

II:5 *L'individu ne doit pas "être adpaté," mais une constant adaptation.*

CANADA

I:18 "Teaching"--- "Learning"

U.S.A.

I:16 Any outdoor setting.

II:15 Settings above don't make more creative teaching: the teaching process in a goal setting does it.

Stmt. 37. **Utilize surroundings and community resources for education, to the best advantage of the curriculum.**

Utiliser les ressources environnantes de l'école et de la communauté pour fins éducatives, au meilleur avantage du curriculum.

QUEBEC

I:23 ...surroundings as prime resource....delete "best."

I:4 *Ajouter "et ce, à travers un curriculum en le medium Plein-Air; n'est pas un secteur mais une démarche globale."*

II:17 *Ressources "naturelles."*

II:13 *Trop peu employées.*

CANADA

I:11 With due care for the environment.

U.S.A.

I:19 Not limited to the "school curriculum"; also includes e.g. boy and girl scout programs.

I:16 Of the "curriculum" of any outdoor education agency.

I:5 And to those desirable learnings not now considered a part of curriculum.

Stmt. 38. **(All objectives of Outdoor Education are) the same as for Physical Education.**

(Tous les objectifs du Plein-Air sont) les mêmes que ceux de l'éducation physique.

QUEBEC

I:22 *L'autonomie de l'individu dans sa réalisation physique dans un contexte de Plein Nature.*

I:10 *Les objectifs du Plein-Air transcendent ceux de l'éducation physique.*

I:6 Outdoor Education is included in the generic term physical education in the sense that it is the education of the body as a means of communication with himself and with the world.

II:13 *Et j'appuis!*

CANADA

I:17 Statement not relevant for today.

I:16 *Pourquoi l'éducation physique?*

U.S.A.

I:15 Only a very few.

I:11 Some.

Stmt. 39. Help the individual to relate with his environment through different physical exercises.*

*Aider l'individu à se mettre en rapport avec son environnement par le biais des différents exercices physiques.**

QUEBEC

I:28 *Surtout pour les niveaux secondaires et collegial.*

I:23 Outdoor education can....

I:15 *Formulation anglaise?*

I:5 *Laissons cet objectif aux fédérations.*

II:13 *Je ne comprends pas.*

II:5 *On fait encore ici état de moyens qui ne doivent en aucun cas déterminer la fin.*

II:3 *Aider l'individu à communiquer avec son environnement par le biais de différents exercises éducatifs.*

CANADA

I:16 *Par le biais d'une participation motrice.*

I:7 Physical exercise?

I:5 Only a part of the whole.

U.S.A.

I:20 What physical exercise?

I:16 ?? In part--needs to be amplified.

OVERSEAS

I:2 Outdoor Education probably, but not necessarily, involves physical activity.

Stmt. 40. **Organic and muscular development of the individual through Physical Education activities and sports in natural settings as primary goal.**

Comme premier objectif, le développement organique et musculaire de l'individu à travers les sports et les activités de l'éducation physique effectuées dans les sites naturels.

QUEBEC

I:28 *Surtout pour secondaire 4 et 5 et le collegial.*

I:12 *Sports?*

I:8 *Pas premier objectif!*

I:5 *Quelle est donc la différence entre Plein-Air et activités traditionnelles?*

II:17 *Objectif de dévelopement de l'individu.*

II:10 *Comme objectif.*

II:5 *Objectif ou conséquence?*

CANADA

I:13 I see Outdoor Education as a common method to all disciplines, not only physical education.

I:5 Primary goal: NO!

Stmt. 41. **Help students to discover the important relationship that can and should exist between classroom instruction and outdoor learning.**

Aider les étudiants à découvrir la relation importante qui peut et qui doit exister entre l'apprentissage en classe et l'apprentissage en milieu naturel.

QUEBEC

1:28 *Surtout pour le niveau élémentaire. Ajouter: "comme une des inter-relations possibles au niveau du curriculum."*

1:5 *En terme d'intégration des matières, il ne devrait pas y avoir de différence.*

CANADA

1:17 All learning and real life situations.

1:8 Not sure about this. Any relationship which is development should be a natural outgrowth of what is done but should not be an objective of Outdoor Education.

U.S.A.

1:20 Outdoor learning should be integral to instruction. The two terms are not parallel.

1:16 This seems appropriate for teacher education programs, perhaps.

1:12 Help students to learn in another environment beyond the school.

Stmt. 42. **Provide an opportunity for direct learning experiences which foster implementation of the school curriculum in many areas.**

Fournir une occasion pour des expériences directes d'apprentissage afin de favoriser l'approfondissement de plusieurs sujets du curriculum scolaire.

QUEBEC

1:15 *...à l'élémentaire surtout.*

1:12 *Approfondissement, aussi découverte et sensibilisation.*

CANADA

1:7 *Implementation?*

Stmt. 43. Enable students to develop new (outdoor) skills and interests, and provide a basis for a lifetime of meaningful living.

Rendre les étudiants capables de développer de nouvelles habiletés et nouveaux intérêts et fournir une base pour une façon de vivre plus enrichissante.

QUEBEC

I:23 Outdoor Education should....

I:19 *...pour une base de vie....*

I:4 *Ajouter: "à condition d'être certain de l'utilisation rationelle du milieu Plein-Air."*

II:17 *Objectif de dévelopment de l'individu.*

U.S.A.

I:15 Some of these may be in the physical domain.

Stmt. 44. Contribute to the establishment of better relations between teachers and students through direct outdoor experiences.

Contribuer à l'établissement de meilleures relations entre professeurs et élèves à travers des expériences directes en Plein-Air.

QUEBEC

I:27 *Ceci devrait être un objectif parmi d'autres.*

I:22 *Ce serait une conséquence, un objectif indirect.*

I:5 *Oui, car l'importance du professeur est relative à l'importance de l'élève.*

CANADA

I:16 *Entre autres....*

U.S.A.

I:19 This is a desirable possible outcome, but not an objective.

I:16 Any good education has this objective.

I:15 This may be a major contribution.

II:15 This is truly a major goal.

II:16 Primarily through extended experiences such as camping.

Stmt. 45. **Provide a context for the child's socialization to occur by giving him additional opportunities for social group life.**

Fournir un contexte de socialisation pour l'enfant en lui offrant des chances additionelles de vie sociale intense au sein d'un groupe.

QUEBEC

I:27 *Ce serait bon pour le développement spécifique de la socialisation selon un âge précis de socialisation.*

I:8 *C'est un objectif qui n'est pas l'apanache exclusif de l'éducation Plein-Air au Québec.*

I:5 *Favorable si on favorise aussi des contextes ou l'on peut se pénétrer profondément de la nature. Permettre à l'élève de vivre son apprentissage dans un élément serein et naturel. Favoriser la prise en main de son "moi" dans des situations toujours changeables, ce qui favorise une constante adaptation à différentes situations au lieu de "l'adapter" à des situation stérotypés.*

II:18 *Contexte harmonieux. N.B. définir socialisation.*

CANADA

I: How is this different from school on a daily base?

U.S.A.

I:17 Change "for social group life" to "for interaction with teachers and peers."

I:16 Vague.

II:15 This also is a major goal.

Stmt. 46. To develop awareness, appreciation and understanding of the natural environment and man's relation to it.

Développer la conscience, l'appréciation et la compréhension de l'environnement naturel et la relation de l'homme avec celui-ci.

QUEBEC

II:17 *Objectif de développement de l'individu.*

CANADA

I:18 Desirable but difficult to evaluate.

I:16 *Entre autre...*

I:12 Why not some man-made areas too?

I:8 Natural is only part of the total environment.

U.S.A.

I:16 In part.

I:15 And responsibility for it.

I:28 *Commentaires sur l'histoire humaine au Québec. Fournir à l'individu un contexte culturel de Plein-Air qui lui fera prendre conscience des liens qui l'unissent avec ses ancêtres et l'histoire: quels étaient leurs moyens de déplacement? (raquette, canot) quels etaient leurs moyens de transporter leur material? (traine-sauvage, traineau esquimau, sac-à-dos, etc.). Comment survivaient-ils? (chasse, pêche, etc.).*

Stmt. 47. To help realize, through Outdoor Education, the full potential of the individual toward optimum development of the mind, body and spirit.

Aider à réaliser, à travers l'éducation Plein-Air, tout le potentiel de l'individu vers un développement complet de l'esprit, du corps et de l'âme.

QUEBEC

I:17 *Ainsi que son ajustement au genre de société dans laquelle il évolue (re: société de loisir, démocratique, etc.).*

II:17 *Objectif de développement de l'individu.*

CANADA

I:18 There for all teaching processes and media.

I:4 Full potential?

U.S.A.

I:17 Delete question and add: contribute to the development of the student's mind, body and spirit.

I:16 I'm not sure what that all means, but it sounds good.

II:24 I am not sure that we can do all three...but maybe we can.

Stmt. 48. Provide a meaningful setting for the development of the affective domain.

Fournir un milieu très favorable au développement affectif de l'individu.

QUEBEC

I:23 ...psychological?

II:5 *De là découlant les changements du comportement.*

CANADA

I:17 Both can be done in a natural environment also.

U.S.A.

I:15 I wish you had given more emphasis to affective domain.

Stmt. 49. **Provide the individual with unique opportunities to develop his creativity and his initiative.**

Fournir à l'individu des occasions uniques de développer son esprit de créativité et d'initiative dans un contexte significatif.

QUEBEC

II:17 *Objectif de développement de l'individu.*

U.S.A.

I:19 Possibly others relating to (1) development of self-reliance, (2) improving group dynamics skills, (3) developing a personal environmental ethic.

II:24 Not sure that we can improve his creativity.

OVERSEAS

I:2 Will depend on the individual's attitude to the outdoor situation, to his companions, and to his teacher.

Stmt. 50. **Provide an opportunity for "relief" from the boredom, drudgery and routine of many learning and teaching situations.**

Fournir une opportunité de "soupape" a l'ennui, la lassitude et la routine de plusieurs situations d'apprentissage et d'enseignement.

QUEBEC

II:20 *On ne doit pas faire du Plein-Air parce ce que l'on ne sait plus quoi faire en classe.*

II:19 *Définir "soupape"; opportunité dilettante.*

II:17 *Trop exprimé par la négative.*

II:13 *Si l'apprentissage se fait par le Plein-Air ou sera la routine?*

II:6 *Et de comprendre la relation entre hommes.*

II:5 *La vraie vie ne doit pas être une "soupape." Le Plein-Air ne doit pas être une "paliatif" à une société déshumanisée, mais bien une tentative d'humanisation.*

II:3 *Fournir une opportunité pour pallier à l'ennui.*

CANADA

I:13 Outdoor Education is not an "escape mechanism."

I:12 Not all children are turned on by the outdoors!

I:8 From my experience, those teachers who are engaged in Outdoor Education are good teachers whose teaching in a classroom is interesting and motivating.

U.S.A.

I:15 Of the three domains, I am convinced that Outdoor Education contributes most to the affective.

PART III: CULTURAL AND SOCIAL ENVIRONMENT

PARTIE III: ENVIRONNEMENT SOCIAL ET CULTUREL

Stmt. 51. Urbanization has deprived children of close contact with the land.

L'urbanisation a dépourvu les enfants d'un contact étroit avec la terre.

QUEBEC

I:22 *C'est souvent cela que se passe.*

I:5 *Et aussi la nature. Ex., on détruit pour les olympiques à Montréal, le seul espace vert de l'île (de Montréal).*

CANADA

I:17 Not necessarily so.

II:16 *Pour les classes sociales inférieures...cependant les classes à l'aise peuvent se payer l'opportunité d'envoyer l'enfant au camp d'été ou d'avoir un chalet ou camper en famille.*

U.S.A.

I:20 If you mean "working the land," okay, but if you mean "relating to environment," not necessarily so.

Stmt. 52. Automation and mechanization have dulled creative energy of many young people.

L'automation et la mécanisation ont contribué à diminuer l'énergie créatrice de beaucoup de nos jeunes gens.

QUEBEC

I:22 *Il ne faudrait pas généraliser.*

I:5 *On les adapte à des situation stéréotypées.*

II:18 *Il y a plusieurs types de créativité.*

II:3 *L'automation et....*

CANADA

I:16 *Majorité ou minorité?*

I:12 Not really so. A factor only. We still have creative people.

II:16 ... *et T.V.*

U.S.A.

I:20 May be for older people jobwise, but not necessarily true for youth--would say it is lifestyle that affects such.

I:17 Strike "for many people."

I:16 I'm not sure if these are causes or effects.

Stmt. 53. There has been an increase in interest and use of the outdoors for relaxation and stabilization of body and mind.

Il y a eu une augmentation dans l'intérêt et l'utilisation du Plein-Air pour la relaxation et la stabilisation du corps et de l'esprit.

QUEBEC

I:17 *Pour la désintoxication, l'évasion, l'humanisation.*

I:23 There is a growing interest....

I:22 *Il y a eu une certaine augmentation....*

I:15 Interest in marketing and sales of equipment. Many people go for the outdoors as a trend or fad. For instance, this year, you are in caravaning, next year it will be skiing, etc.

I:8 *Stabilisation = harmonie.*

I:4 *Ajouter: et ce, souvent au détriment de l'environnement en y aménageant un context au service de l'homme.*

I:5 *Oui, en favorisant la chasse et la pêche (comme publicité).*

II:13 *Peut être un peu trop passif.*

CANADA

I:7 This is a very complex statement, which requires elaboration.

U.S.A.

I:20 Increase by whom? Some are utilizing outdoors for such, percentage-wise more?

I:15 I doubt that the presently observed "trends" are old enough to generalize about. Along with backpacking, have come snowmobiles, off-trail vehicles, etc.

II:15 But not for nearly enough people.

Stmt. 54. There is a widespread lack of knowledge and appreciation and skill for participation in meaningful outdoor experiences.

Il y a un vaste manque de connaissances et d'habileté pour la participation à des expériences enrichissantes en Plein-Air

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QUEBEC

I:4 *Ajouter: "en vertu d'un trop grand nombre d'individu non-preparés au contexte naturel du milieu."*

I:5 *Oui, le contexte social actuel du Québec tue le dynamisme des gens qui oeuvre en ce sens, pour se retourner vers des oeuvres qui amenant des resultats immediats et en signe de piastre.*

II:20 *Connaissances, habilités et "vécu."*

II:5 *Aussi manque de vécu.*

CANADA

I:18 Among whom?

I:17 If you are talking recreation, I guess so.

U.S.A.

I:19 Should not imply all, or even "most" experiences require a high degree of skill in order to be worthwhile.

I:17 This question involves several value judgments; e.g., what is the "knowledge" you suggest a lack of? Whose definition of "meaningful experience do you wisn to use?

I:16 Meaningful--in whose terms.

I:12 Among certain age, social and socio-economic groups.

Stmt. 55. Modern society has increased the need for mental and physical fitness,

Stmt. 56. --for regaining contact with basic realities found in nature,

Stmt. 57. --for more creative living, and for spiritual satisfactions.

La société moderne a augmenté le besoin pour la bonne forme physique et mentale,
--pour reprendre contact avec les réalités fondamentales trouvées dans la nature,
--pour une vie plus enrichissante et pour des satisfactions spirituelles.

QUEBEC

I:15 Too much!

I:8 *Dans le contexte Québecois, la bonne forme physique et mental est prêchée en fonction d'objectifs plutôt materiels.*

I:5 *Pas avec le contact des réalités fundamentales mais bien l'activité physique pour l'activité afin de "robotiser" l'individu vers une forme de matérialisme productif.*

II:13 *Par voie de conséquence.*

CANADA

I:16 *Je ne sais pas que le contact avec la nature soit bon et enrichissant pour chaque être. Dans la société toutefois il est bon que tous aient une relation positive avec le nature.*

U.S.A.

II:16 What aspects of modern society?

II:24 Modern society has moved away from a need for physical fitness. There are things that do the work for us.

Stmt. 58. In any social setting, man has the need to live peaceably with others and with nature, and to develop tolerance, self-reliance, and understanding.

Dans un contexte social, l'homme a besoin de vivre en paix avec les autres et avec la nature; il a aussi besoin de développer de la tolérance, de la confiance en soi et de la compréhension.

QUEBEC

I:22 *Il le faut bien!*

I:5 *Le Plein-Air est, selon moi, une des seules façons de réaliser cet énoncé.*

CANADA

I:7 Does self-reliance belong with tolerance and understanding?

U.S.A.

I:15 But this also applies to school, home, church, and any place where people meet (any social setting).

CANADA

I:16 *Des valeurs sociales en fonction du bien commun.*

II:16 *Socialiste?*

U.S.A.

I:12 Only if this is a planned objective.

II:15 Education as an obligation to go beyond "passing on cultural heritage." It should improve.

Stmt. 59. **A free public education for all children is important in society, and the school should act as an agent for fostering the development of the individual to his fullest potential as well as for fostering democratic values and passing on the cultural heritage.**

Une éducation publique gratuite est importante dans notre société et l'école devrait agir comme un agent pour favoriser le développement des potentialités d'un individu aussi pour l'épanouissement des valeurs démocratiques et la transmission de l'héritage culturel.

QUEBEC

I:23 The classroom too often cramps and limits the individual. Stronger emphasis on the value of Outdoor Education could do much to foster. . . .

I:18 *C'est vrai comme concept ou comme objectif, mais ce n'est pas la réalité. L'école est le reflet de la société; elle contrôle.... La complexité de la société se sent imposée à l'école. L'enfant risque de perdre son authenticité naturelle.*

I:12 *"Agit": on devrait lire, "devrait agir"....*

I:12 *Ajouter: "l'école d'aujourd-hui vs. l'éducation libre qui l'on vise."*

II:17 *Education publique gratuite, accessible à tous.*

II:28 *Les organisme extra-scolaires ont aussi une note très importante à jouer en vue de l'épanouissement des valeurs culturelles. Exemple: les différents programmes du Ministère des Affaires Culturelles. Idem pour le Ministère des Affaires Indiennes et du Grand Nord, ainsi que differents groupes publics et privés.*

Stmt. 60. The natural environment setting constitutes a "relief" for the individual who often cannot, in his everyday life, find relaxation and peace.

Le contexte de l'environnement naturel sert de "soupape" pour l'individu qui souvent ne peut, à travers son quotidien, trouver matière à détente et paix.

QUEBEC

II:17 *Entre autre! Et c'est très actuel.*

CANADA

I:16 *Il faut apprendre à mieux vivre dans l'environnement urbain. Il faut de son temps d'éducation et de loisir en nature.*

I:12 It can, there are other ways.

I:7 Not yet fully researched!

U.S.A.

I:17 Strike question and substitute, "An appropriate outdoor setting may offer opportunity for relaxation for the individual who often cannot, in his everyday life, find relaxation and peace.

I:15 It is not "palliative" we need; drugs provide these.

Stmt. 61. Experiences of outdoor living can develop an appreciation for the life style of native inhabitants, colonists and explorers of the land.

Les experiences de vie au grand air peuvent développer une appréciation pour le style de vie des groupes ethniques, des premiers colons et des explorateurs du pays.

QUEBEC

II:5 *On ne doit surtout pas en rester là.*

CANADA

I:12 Perhaps.

PART IV: OUTDOOR EDUCATION/LEARNING

PARTIE IV: EDUCATION PLEIN-AIR/APPRENTISSAGE

Stmt. 62. The nature of man is such that he has a need for non-artificial environment and cannot be separated from it; to separate him causes continuous pressures.

La nature de l'homme est telle, qu'en général, il a besoin d'un environnement non-artificiel dont il ne peut pas être séparé; l'en priver cause des pressions continuelles.

QUEBEC

I:28 *L'homme peut très bien marier les deux genres d'environnement.*

I:22 *D'accord, mais c'est ce qui se passe souvent. L'homme s'habitue à son environnement artificiel et il en subit tous les "stress." De là, les maladies dites de civilization.*

I:13 *Cela est vrai pour un certain nombre!*

I:6 The nature of man is to adapt. This is why he has survived
as a species. These continuous pressures force him to adapt
continuously. Man, as an individual, needs to return to a sem-
blance of permanence to support the stress of change. The non-
artificial environment can be that semblance of permance referred
to as well as permanent institutions such as family, church, etc.

II:6 *Il ne faut pas oublier que l'environnement naturel peut causer autant de pressions pour un homme qui n'y est pas habitué. Le nature de l'homme, qui le connait?*

I:5 *Où est la cause de tous les maux et malaises actuels.*

CANADA

I:18 A paradox: The natural environment is full of continuous pressures.

I:16 Dans un programe d'éducation Plein-Air, il faut qu'il y ait des occasions où l'étudiant est activement impliqué dans la planification.

I:12 Not sure.

II:16 Relatif: Définir l'histoire de l'homme ce dernier a constamment modifié son environnement pour son bien être; il doit y avoir la quelque chose de naturel chez l'homme.

OVERSEAS

I:2 A non-artificial environment, e.g., no nylon, no modern aids, will lead to a quick death for most people in the great outdoors.

Stmt. 63. Most children and youth can be described as tending to be adventurous, exploratory minded, active, energetic and curious.

La plupart des enfants et adolescents peuvent être décrits comme étant actifs, énergiques, curieux, jouissant d'un esprit d'exploration et d'aventure.

QUEBEC

I:18 Il y a exploration cinétique (voulant franchir les montagnes) et exploration immobile (démonter une montre pour tenter de la reconstruire).

I:5 L'école tue cet énergie et cet esprit d'aventure.

II:5 Le valeur et que l'école actuelle tue le dynamisme et la créativité des jeunes par des situation d'apprentissage trop stéréotypés.

OVERSEAS

I:2 Emphasizing "normal."

Stmt. 64. **Most children possess a natural yearning for the active outdoor life and respond readily and happily to it.**

La plupart des enfants possèdent un penchant naturel pour une vie active en Plein-Air et réagissent d'emblée et agréablement à celle-ci

QUEBEC

I:23 Many children....

I:10 *...devrait naturellement posséder....*

I:5 *La société par les biais de l'école tue le dynamisme des individus.*

II:13 *Dépendamment de leur milieux de provenance, ils doivent être plus ou moins dirigés.*

CANADA

I:12 Many do not care for the outdoors ("too cold, wet feet").

II:16 50%+

Stmt. 65. **Most methods (methodology) used in Outdoor Education provide motivation for learning.**

La plupart des méthodes utilisées dans l'enseignement en Plein-Air favorisent le développement d'une motivation.*

QUEBEC

I:22 *Pas toujours. Cela dépend de la méthodologie utilisée.*

I:12 *"Les méthodes": on devrait lire "la méthodologie."*

I:11 *Plusieurs méthodes utilisées sont uniquement fondées sur une motivation extrinsèque, ex. système de "badge," trophées, compétition, etc.*

I:5 *On en est pas encore rendu à provoquer ça.*

II:5 *Actuellement on met trop l'accent sur les moyens de locomotion, on néglige l'essential du Plein-Air qui se voudrait favorable à permettre l'utilization des potentialités individuelles que la société tend à freiner.*

CANADA

I:12 Motivation for what?

U.S.A.

I:17 Substitute intrinsic motivation is achieved in an outdoor setting if appropriate methods are used.

I:15 "Some methods" used in Outdoor Education do. Some are just as bad as some in-class ones.

II:15 I am beginning to see more "school-type" methods creeping in and Outdoor Education becoming more academic. This I deplore.

II:9 Most methods in Outdoor Education can provide motivation.

Stmt. 66. The outdoors can be approached through discovery, exploration, adventure, and research in which there is intense interest in activities that are natural to children and problem solving is used in the context of natural settings.

Le Plein-Air peut être approché à travers la découverte, l'exploration et l'aventure, et la recherche dans laquelle il y a un intérêt intense dans les activités qui sont naturelles pour les enfants; aussi, la méthode de résolution de problèmes est employée dans le contexte de sites naturels.

QUEBEC

I:26 *Devrait être approché....*

I:23 The outdoors should be...research which involves activities... and through problem solving used....

I:15 Stress on problem solving.

I:13 *Devrait être....*

I:12 *Une méthodologie utilisant la résolution de problèmes dans un context (cycle complet) d'individualisation de l'enseignement.*

I:11 *Le contact avec les milieux naturels se réalise par...recherche. Les enfants y trouvent des activités, tout naturellement. Dans le context des espaces naturels, résolution de problèmes est largement utilisé.*

U.S.A.

I:18 Not clear.

I:17 Learning in the outdoors is best applied through....

I:16 So much depends on other variables, teacher timing and so forth.

II:15 This is the "wholistic approach" which I heartily approve!!

OVERSEAS

I:1 Should be so at least.

Stmt. 67. Develop the "self-concept" of the individual through all kinds of outdoor settings demanding continuous adaptations.

Developper le "moi" de l'individu par toutes sortes de situations de Plein-Air exigeant des adaptations continuelles.

QUEBEC

I:23 Outdoor Education should....

U.S.A.

I:20 The adaptation doesn't necessarily develop self-concept--it is the nature of activity and impact of perceptions on self.

I:15 But so does all of education.

Stmt. 68. There is an "open/free" atmosphere in outdoor experiences in which teacher/pupil rapport develops and allows students to become actively involved in planning with the teacher for learning experiences.

L'atmosphère particulière dans les expériences de Plein-Air peut améliorer le rapport professeur-élève et permet aux étudiants de devenir directement impliqués avec les professeurs dans la planification des expériences d'apprentissage.

QUEBEC

I:27 *La première partie de cet enoncé est excellente. Mais, pour la deuxième partie, tout dépend du mode du planification utilisée.*

I:23 There is a stimulation in Outdoor....

I:22 *Comme dans l'enseignement actif de n'importe du quelle matière scolaire.*

I:21 *...peut améliorer le rapport professeur-élève et peut permettre aux étudiants de devenir....*

I:11 *Tout dépend de la conception pédagogique de l'éducation: "organique" or "mécaniste."*

CANADA

I:18 As long as "open/free" does not mean "planless/chaotic."

II:9 This should and could be....

II:16 *A l'exception des activités ou il y a risque--au nom de la sécurité, la compétition doit faire place à la démocratie et même de l'apprentissage.*

U.S.A.

I:19 "Informal" might be a better word choice than "permissive."

I:17 Delete "permissive" and substitute "special."

I:16 This again depends upon teachers and leaders. I don't think that it just happens.

I:11 Permissive has a negative connotation in the minds of many.

II:16 This is dependent upon the kind of persons as leaders.

Man is part of nature and continuous
with nature. His flexibility and
adaptability permit him to survive in
widely differing environments, both
Stmt. 69. physical and cultural. In many cases,
--humans have to re-learn how to live in
Stmt. 70. a natural versus artificial environment,
Stmt. 71. --live better in urban environments.

L'homme est partie intégrante et continue de la nature. Sa flexibilité et son adaptabilité lui permettent de survivre dans des environnements très différents, à la fois physiques et culturels. Dans plusieurs cas, le humains ont à réapprendre
--comment vivre dans un environnement naturel versus un environnement artificiel,
--à mieux vivre dans les environnements urbains.

QUEBEC

I:11 *Sa souplesse et...la mobilité des population expliquent beaucoup de drames écologiques. L'environnement n'arrive pas toujours à s'adapter à ces variations de populations. Ex. les Européens en Amérique du Sud, les blancs dans le Nord, etc.*

I:5 *Ceci est bien malheureux maix c'est un fait. C'est pourquoi l'éducation Plein-Air dans le contexte Québecois urge.*

CANADA

I:12 Many don't survive in any environment.

II:16 *Est-ce vraiment ce qu'il faut? Il faut surtout apprendre à vivre en ville.*

Stmt. 72. Outdoor Education provides for the integration of learning in a setting that allows creative teaching with opportunities of acquiring specific skills and knowledge.

L'éducation Plein-Air favorise l'intégration de l'apprentissage dans une situation qui permet un enseignement créateur, avec des opportunités pour l'acquisition d'habiletés et et de connaissances spécifiques.

QUEBEC

I:21 *...peut procurer l'intégration....*

I:11 *Plus réaliste que la question 6.*

I:6 That allows creative leadership.

I:5 *Par le Plein-Air on peut intégrer toutes les matières dans le sens que l'on des situations au lieu de subir des situations.*

II:5 *J'aurais plus que des habilités et connaissances spécifiques exigent des situation stéréotypées, et un enseignement basé sur les critères du professeur.*

CANADA

I:7 And attitudes.

U.S.A.

I:16 So might any classroom.

I:15 It does for the creative teacher, there is no magic in the outdoors which makes an autocrat into a democrat.

Stmt. 73. Students can become actively involved in planning for outdoor learning experiences; this may increase student-teacher rapport.

Les étudiants peuvent devenir activement impliqués dans la planification des expériences d'apprentissage de Plein-Air, ceci peut améliorer le rapport élève/professeur.

QUEBEC

I:28 *Surtout pour les niveaux secondaires et plus élèves.*

I:21 *...peut devenir activement impliqués....*

I:15 ...can could be stronger.

CANADA

I:18 Also true for indoor planning as well.

I:17 Only if the teacher allows it.

U.S.A.

I:16 Yes, if the teachers value this.

I:12 If planning occurs!

II:16 Depends on teacher-leader.

Stmt. 74. The multisensory approach of tasting, looking, smelling, hearing, and touching provides direct learning experience that should be used in the out-of-doors.

La méthode multi-sensorielle de l'odorat, de la vue, de l'ouïe et du toucher procure une expérience directe d'apprentissage qui devrait être utilisé en Plein-Air.

QUEBEC

II:5 *Oui, surtout l'élémentaire ou l'on met l'accent sur le sensori-moteur.*

U.S.A.

I:17 Delete either "feeling" or "touching" and substitute "tasting."

PART V: OUTDOOR EDUCATION/TEACHER EDUCATION/CURRICULUM

PARTIE V: EDUCATION PLEIN-AIR/FORMATION DES MAITRES/CURRICULUM

Stmt. 75. Based on the premise that Outdoor Education is a multi-disciplinary learning process, Outdoor Education should be included in teacher education curricula.

En nous basant sur la prémisse que l'éducation Plein-Air est un processus d'apprentissage multi-disciplinaire, l'éducation Plein-Air devrait être incluse dans les programmes de formation des maîtres.

QUEBEC

I:28 *C'est d'ailleurs le seul moyen d'y arriver.*

I:23 By all means!

I:18 *Pas comme programme unifiée pour l'instant, c'est trop tôt!*

I:4 *Sans en faire une matière spécifique et trop isolée.*

I:5 *S'il est vrai que l'éducation doit modifier des comportements dans un sens de créativité, le future maître aussi doit inclure des principes d'adaptabilité: il ne doit pas lui être "adapté" mais "s'adapter" a différentes situations. Or dans le context social actuel au Quebec, seul le Plein-Air permet encore cet adaptabilité à diverses situations.*

II:13 *Surtout!*

II:5 *Il serait grand temps et non seulement en éducation physique mais à toutes les specialités.*

OVERSEAS

I:2 On a voluntary basis.

I:2 Others: Safety.

I:1 No individual aspect should be stressed more than the others.

In an Outdoor Education curriculum, primary emphasis should be placed upon; also rank from 1 to 5 or more, 1 being the most important:*

Rank:

Stmt. 76. a. Knowledge (know). 81 ☐
Stmt. 77. b. Outdoor skills (know how). 82 ☐
Stmt. 78. c. Attitude (know how to be). 83 ☐
Stmt. 79. d. Affective domain. 84 ☐
Stmt. 80. e. Methodology of instruction. 85 ☐

*Dans un curriculum en éducation Plein-Air, l'emphase principale devrait être placée sur les points suivants; aussi les classer par ordre de priorité, 1 étant le plus important:**

Rang:

a. connaissances (savoir). ☐
b. habiletés de Plein-Air (savoir faire). ☐
c. attitudes (savoir être). ☐
d. domaine affectif. ☐
e. méthodologie d'instruction. ☐

QUEBEC

I:18 (e) adaptability.

I:13 Others: Behavior.

I:1 Behavior.

II:17 *Méthodologie d'animation.*

CANADA

I:16 *Pour la formation des maîtres du premier cycle universitaire.*

I:13 What is difference between (c) and (d)?

I:17 Should not be ranked.

I:4 To know is basic for skills and attitudes, but when all is said and done, to know is really least important.

U.S.A.

I:11 Ways of teaching the environmental curriculum.

I:19 I do not believe they should be ranked since the relative importance varies with the individual learner and the situation.

I:12 To teach!!! To be trained, skilled in teaching others.

I:17 Processes (experiences).

II:20 Attitude is a result of others.

OVERSEAS

I:2 Others: Safety

I:1 No individual aspect should be stressed more than the others.

The role of the teacher in Outdoor Education in public schools should be; also rank each of the following from 1 to 5 or more, 1 being the most important:*

			Rank:
Stmt. 86.	a. Teaching.	92	☐
Stmt. 87.	b. Leadership.	93	☐
Stmt. 88.	c. Administration.	94	☐
Stmt. 89.	d. Eveluation.	95	☐
Stmt. 90.	e. Public relations agent.	96	☐
Stmt. 91.	f. "Catalysing" agent.	97	☐

*Les tâches de l'éducateur de Plein-Air dans nos écoles devraient être les suivantes; aussi classer par ordre de priorité, 1 étant la plus importante:**

	Rang:
a. enseignement.	☐
b. animation.	☐
c. administration.	☐
d. évaluation.	☐
e. agent de relations publiques.	☐
f. agent "catalyseur".	☐

QUEBEC

I:27 *Cela dépend beaucoup du contexte du milieu de travail.*

I:25 *(f) Catalyseur.*

I:15 Administration and public relations agent should be the concern of other school services or departments.

I:13 *Le meilleur agent, c'est l'élève!*

I:11 *(g) Entrainement du personnel. "Conseiller pédagogique" au lieu de "professeur."*

I:6 *(f) Facilitateur.*

I:5 *Il doit être avant tout un animateur. Je changerais le terme enseignement par "pédagogue." L'administration ne le concerne pas.*

II:5 *Pour moi, le domaine affectif comprend le "savoir être," appreciation, attitudes, et intérêts.*

I:1 Self-renewal, capacity, creativity, unification.

Conscience des dangers inhérents aux activités en milieux naturels.

II:26 *Enseignement: de la façon d'utiliser le cadre Plein-Air pour diverses activités physiques ou culturelles.*

CANADA

I:16 *Ici on suppose qu'il y a un besoin de "spécialiste" dans chaque école qui enseigne le Plein-Air. J'ai de la difficulté a supporter cette hypothèse.*

I:8 (f) "Catalysing agent" is part of a "teaching" role.

I:7 Should not be ranked!

I:6 (f) personal commitment.

I:5 It depends on age level. K-3 pupils: no emphasis on identification type of knowledge but know how to feel about green magic.

I:4 By leadership, I would include example. This would be most important.

U.S.A.

I:21 (a) teaching (facilitating learning).

I:20 These are all essential roles if the job is to get done.

I:17 We feel that most of the important roles for the teacher are not included in the above. We present below a list we feel more meaningful:
  a. organizer (planning, logistics)
  b. facilitator
  c. participant-observer
  d. reviewer (extender)

I:11 I don't like the title "the Outdoor Education teacher." Rather use teacher-leader of Outdoor Education experiences.

APPENDIX A2

PERSONAL DEFINITIONS AS GIVEN BY EXPERTS DURING PHASE I

GROUP I: QUEBEC

1* Processus éducatif dérivant d'un ensemble d'activités organisées, se déroulant dans la nature, basées sur l'exploitation du potentiel offert par le milieu naturel et contribuant du développement de l'élève tant sur le plan physique que psychique, tout en accroissant son degré de conscience de ses interrelations avec la nature, et susceptible de modifier ses attitudes et comportements vis-à-vis du milieu naturel.

2 L'éducation Plein-Air est un processus naturel d'apprentissage par lequel l'individu apprend au contact de la nature à observer, apprécier, comprendre, interpréter, aimer et conserver l'immense richesse qui l'environne.

4 Une conscience d'un habitat à connaître et dans lequel l' homme doit "s'ajuster" et non pas ajuster cet habitat aux services des atteintes de l'homme.

5 Créer un comportement manifeste et permanent, de telle sorte qu'il s'établisse chez les individus, des relation positives avec son environnement naturel.

6 L'éducation Plein-Air est une suite de situations vécues qui contribuent à l'auto-détermination de l'enfant et qui sert d' inference concrète pour toutes les autres matières au programme.

7 Une mode de vie où l'homme entretient une relation harmonieuse avec son environnement toute en explorant ses multiples facettes par divers moyens. Il vise la compréhension et le respect dans cette relation et non pas la destruction ou modification pour ses fins artificiels.

8 L'éducation Plein-Air est cet apprentissage à vivre dans l'environnement naturel que l'on comprend et apprécie a l'intérieur d'une activité physique libre ou récréative. Cette expérience vécue s'inscrit dans un contexte d'intégration de l'homme à l'équilibre naturel du milieu.

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*Indicates respondent number.

9 Processus (a caracteristique longitudinal) d'apprentissage par l'expérience directe, le contact avec le milieu naturel et l'expérience des difficultés, caractérisé par la multidisciplinarité, l'encadrement limité et la stimulation des potentialités physiques, psycho-sociales et créatrices de l'individu dans une perspective de découverte d'une façon durable de vivre et de communiquer.

10 Un mode de vie ou l'homme entretient un rapport actif en harmonie avec les éléments de la nature.

11 Par des situations d'apprentissage en milieu naturel, contribuer au développement intégral de la personne à l'égard d'elle-même et de ses relations avec l'environnement.

12 Situations permettant à tout individu d'entrer en relation directe avec les éléments de la nature, ceci dans un contexte ou nous retrouvons un équipement très rudimentaire, voir même que son "etat corporel." Ces sources de stimuli permettent l'humain de s'assurer une connaissance plus approfondie de lui-même.

13 Le Plein-Air se définit par le "contact actif de l'individu avec les éléments de la nature et de son environnement. On se doit donc de connaître le contexte naturel, ce milieu de vie et posséder un minimum de technique des activités physiques que ne sont que des moyens d'accès à un comportement de vie plus équilibrée.

C'est une philosophie de vie c'est prendre connaissance de notre dimension, de notre entité. C'est aussi essayer de s'intégrer dans un éco-systeme le plus "positivement" possible.

14 Vivre une serie d'experiences permettant une intégration progressive de l'individu dans son milieu naturel.

16 C'est le processus éducationnel qui permet à l'enfant de s'épanouir au moyen d'experiences qui le mettent en contact avec la nature.

17 Education par le Plein-Air--Regarde la question des méthodes actives en éducation. Le Plein-Air devient ici un instrument pour enrichir les procédés éducatifs.

Education pour et au sujet du Plein-Air--L'on abord ici le développement d'attitudes, d'habilités, l'acquisition de connaissances dont l'individu aura besoin pour trouver satisfaction dans le Plein-Air.

18 *L'Education Plein-Air serait l'utilisation des extérieurs de la classe, en fonction de divers apprentissages, conduisant l'éduqué vers un développement qualitatif de sa personne, le tout orienté dans une démarche organique et une intervention individualisée....*

19 *Le Plein-Air ne peut qu'être défini au travers d'un concept multidimensionel et multidisciplinaire et non au travers d'une phrase.*

20 *Un moyen par lequel l'enfant vit des situations d'apprentissage en milieu naturel.*

21 *Processus d'apprentissage multi-disciplinaire visant l'atteinte des but et objectifs généraux de l'éducation en utilisant le Plein-Air comme laboratoire.*

22 *Ce serait permettre à un individu d'apprendre à faire des activités physiques (ou autres) dans un environnement de pleine nature auquel il y aurait tendance à intégration.*

23 Outdoor Education is the process of sensitizing all ages to the environment in the most practical way possible, so that the individual may (1) come to understand the intricate balance in nature, (2) sense the underlying principles which govern all living things, (3) see himself in relation to the whole and at the same time, (4) find in nature both mental and physical stimulation as well as enjoyment and relaxation without transgressing the basic concepts of conservation.

24 *Processus lié à l'apprentissage de connaissances, l'habilités et d'attitudes durables, en ayant comme cadre le milieu naturel (dans un lieu exposé à l'air libre) et comme object l'utilisation des ressources naturelles.*

27 *Deux définitions:* 1^{ere}*, un content;* 2^{eme}*, un contenu.*
(1) L'utilisation de l'environnement naturel pour la réalisation de certains objectifs généraux d'éducation ou pour l'intégration de certaines matières.
(2) Une matière spécifique qui fait vivre l'élève dans le milieu naturel des experiences d'apprentissage orientées dans le but de l'amener à connaître, apprécier la nature, à le sensibiliser à la conservation et lui apprendre à évoluer dans la nature en y utilisant les éléments.

28 *Le Plein-Air est une réalité culturelle qui se situe de façon spécifique dans notre société post-industrielle. Dans cette perspective très large, nous dirons également que le Plein-Air est une réalité sociale dans toutes les classes de la société et dont l'implication socio-économique est mondiale.*

Au Québec, le concept du Plein-Air a evolué de façon substantielle depuis cinq ans et ce même concept se situe à un carrefour entre le contexte nord-americain et le contexte européen.

L'éducation Plein-Air devrait viser: (1) l'enfant, l'adolescent et l'adulte comme premier centre d'intérêt, exemple: aider l'individu à se mettre en rapport avec son environnement, par le biais des différentes activités structurées (exercices physiques ou d'intéret écologique). (2) Faire prendre conscience à l'individu des immenses richesses de son environnement, en l'utilisant sagement en vue de le conserver et même de l'améliorer.

15 Learning about life, in and through the outdoors.

GROUP II: CANADA

2 Impossible to paraphrase in words; I also have no desire to tie it down this way; this is an exercise in semantics which cannot carry the same meaning for all readers.

3 Any experience with out-of-doors, be it recreational, environmental, social.

5 Outdoor Education is a methodology or technique, cutting across all subject boundaries to give the learner "good" education from three wide areas, e.g., (1) challenge-adventure aspect and development of skills for leisure time, (2) appreciation of nature through sensory awareness techniques, (3) creative skill development using natural materials wisely, e.g., basketry, lapidary, painting, etc.

6 As a method for bringing an individual to face himself, others, and the total environment with a view to encouraging growth in that individual.

10 I don't like the term "Outdoor"--prefer Environmental." Also feel definitions rather unimportant. The UNESCO Belgrade Workshop statement says it pretty well.

16 *Même qu'en stmt. 23, mais (1) en spécifiant que c'est l'éducation Plein-Air en milieu scolaire, (2) se déroulant hors des murs de l'école ou des éléments de la nature sont présents.*

GROUP III: U.S.A.

1 Outdoor Education is a means of curriculum enrichment, a setting that enhances learning and provides for direct experiences and the opportunity for solving real-life problems. It cuts across all the subject matter areas and is best used by the teacher as a planned part of the learning process.

2 Starting from the base of "curriculum as that which happens to a child or learner" as opposed to the subject matter or content taught, then Outdoor Education is but a means to implement the curriculum in a way determined by the appropriate content of the moment when and where it provides the best fit (based on L. B. Sharp's definition of Outdoor Education).

7 Educating in and/or about the outdoor environment.

9 Outdoor Education is an educational process that takes place within the natural environment. It is an extension of the classroom into the natural environment. Outdoor Education provides: opportunities for the student to acquire a variety of outdoor skills, a setting that enables concepts and attitudes toward the natural environment to be derived by the student, and a setting for the student to be able to identify his place in the total life processes.

10 Using the outdoor environment as a medium or resource for teaching.

12 Outdoor Education is the use of a learning environment beyond the walls of the school.

14 I feel the term "Outdoor Education" has given way to "environmental education" which utilizes natural environments for the purpose of helping students realize that natural environments are a part of the total life support system.

15 Educational activities carried on outdoors. Thirty years ago, I would have relished your emphasis on "defining": I have considerably less enthusiasm for it today.

Pragmatically, a person's definition of Outdoor Education is determined by what (and how) he does educationally outdoors, and I have learned to have less and less regard for what he says, especially when he writes it.

Defining is probably a fine academic exercise, but I observe little relationship between what people say they believe and what they do--and what they do is truly the thing that matters.

18 Outdoor Education is an approach toward achieving the goals and objectives of the curriculum which involves (1) an extension of the classroom to the outdoor laboratory; (2) a series of direct experiences in any or all phases of the curriculum involving natural materials and living situations which increase awareness of environment and life; (3) a program that involves pupils, teachers, and Outdoor Education resource people planning and working together to develop an optimum teaching-learning climate.

Outdoor Education is the utilization of the out-of-doors as a laboratory for learning.

20 I do not get "hung up" on a specific definition and seldom if ever define. I talk in terms of the objective of whatever group I'm dealing with and/or trying to distinguish what *others* seem to mean by their terms. I am not one of those who feel strongly about Outdoor Education being a METHOD in contrast to Environmental Education.

The only criterion I really have is that it must be oriented to natural environment in some way.

21 A learning activity that uses primarily the natural environment (as opposed to the man-made or highly man-altered environment).

23 Utilization of the materials and processes found in the out-of-doors for the achievement of educational goals and objectives.

16 Actively learning/participating in, for, and about the outdoors in teaching/learning.

3 Actively learning/participating in, for, and about the natural out-of-doors.

I like a combination of Julian's and L. B. Sharp's *description* as "things that can best be taught..." etc., and perhaps Knapp and Rillo's definition.

Those things that can best be learned in the classroom should there by learned, and those things that can best be learned outside the classroom, through direct experience, should there be learned.

Those activities conducted *in* and *for* the out-of-doors--J. Smith.

Applies to a wide variety of learning experiences that take place in an outdoor setting, and to the skills, appreciations, and attitudes needed for maximum satisfaction in outdoor recreation and activities. Some of these may relate to subject matter areas, educational disciplines, and mental fitness. In outdoor settings, rich in nature's resources, Outdoor Education provides many opportunities to develop conservation concepts, acquire skills, and provide for participation in good and wholesome activities.--Julian Smith

A process of teaching and learning which utilizes the outdoor environment to convey those attitudes, concepts, intellectual processes, and skills which can be more effectively learned there.--Clifford E. Knapp and Thomas J. Rillo

GROUP 4--OVERSEAS

1 "Environmental education is the process of recognising values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among man, his culture, and his biophysical surroundings. Environmental education also entails practice in decision-making and self-formulation of a code of behavior about issues concerning environmental quality" and man-to-man relationships. Environmental education is based on the scientific, incontrovertible facts of ecology.

This definition was adopted by the "International Working Meeting on Environmental Education in the School Curriculum," organised by the IUCN Commission on Education under the sponsorship of UNESCO, at Ruschlikon, Switzerland, 1970; the underlined is my own addition.

2 A conscious process using the outdoors and all that it provides. Whereas outdoor recreation is a self-motivated use of the outdoors for leisure when learning may happen incidentally.

6 Carrying out the education process in an informal natural medium using all the potentialities of nature, the environment, as a laboratory to enhance and enrich the learning process and make it more real.

7 I think it is positively harmful to equate "Outdoor Education" with "Environmental Education." By its very nature, Outdoor Education embraces any educational process going on out-of-doors. In Europe, I would say that the term was largely redundant, as there is and should be a move towards meaning education according to its specific topic and content. I would say that Outdoor Education as a generic term

would be understood to refer to activities such as those undertaken by Boy Scouts, canoeing clubs, Outward Bound schools (survival in the outdoors), and other physical pursuits in the countryside. Outdoor Education does not in itself postulate any philosophy or knowledge base. Therefore, in the terms of your questionnaire, I would classify Outdoor Education as "Learning in the Outdoors" with perhaps the added connotation of "Learning by Doing."

Within these broad parameters, Outdoor Education could include a wide variety of curriculum topics. Obviously, I would like to see "Environmental Education and Ecology" strongly represented as this is an ideal subject to comprehend and experience outside the classroom. Furthermore, Outdoor Education should not merely concentrate on the natural environment, but should introduce the learner to his role in the community as a citizen. Many people see the "great outdoors" as a source of human spiritual renewal, which can give a pleasure and meaning to life throughout our youth and adult life.

APPENDIX B

RESEARCH INSTRUMENT--PHASE II

(QUEBEC SAMPLE ONLY)

APPENDIX B

RESEARCH INSTRUMENT--PHASE II

QUESTIONNAIRE "DELPHI" Date:________________

Name of respondent________________________ Tel.:________________

Address____

Agency & Title____

Specialization____

DIRECTIONS:

*Evaluate each statement according to the following:

SA: You "strongly agree" with the statement

A: You "agree" with the statement

D: You "disagree" with the statement

SD: You "strongly disagree" with the statement

N: You are "neutral" or "undecided"

**Please CIRCLE the appropriate letter indicating the strength of your agreement or disagreement with the statements below.

Also, if you cannot subscribe to the wording or the meaning of the statement, write the modification in the blank provided.

PART I: DEFINITION OF OUTDOOR EDUCATION

PARTIE I: DEFINITION DE L'EDUCATION PLEIN-AIR

In your view, Outdoor Education should be defined as: "the" or "one of the" definition(s)...each definition should be considered as a whole by itself and exclusively.

Selon votre opinion, l'Education Plein-Air devrait être définie comme: "la" or "une des" définition(s)...chaque définition doit être considérée comme un tout en soi et isolément.

Statement

1. Learning in the Outdoors.* SA A N D SD
*L'apprentissage dans le Plein-Air.** AF A N D DF

Modification:

2. Learning for the Outdoors. SA A N D SD
L'apprentissage pour le Plein-Air. AF A N D DF

Modification:

3. Learning through the Outdoors. SA A N D SD
L'apprentissage par le Plein-Air. AF A N D DF

Modification:

4. Learning about the Outdoors. SA A N D SD
L'apprentissage au sujet du Plein-Air. AF A N D DF

Modification:

5. Learning in and for the outdoors. SA A N D SD
L'apprentissage dans et pour le Plein-Air. AF A N D DF

Modification:

*"Outdoors" = "Physical environment outside the classroom"
*"*Plein-Air" = "Milieu physique en dehors de la classe"*

Statement

6. Learning in, for, through and about the Outdoors.

SA A N D SD

Apprentissage dans, pour, par et au sujet du Plein-Air.

AF A N D DF

Modification:

7. Curriculum supplement that facilitates and enhances learning/teaching.

SA A N D SD

Une méthode d'enseignement qui facilite et enrichit l'apprentissage.

AF A N D DF

Modification:

8. Learning process that cuts across the school curriculum offerings, through physical education, natural sciences, social sciences and many other subject matters.

SA A N D SD

Un processus d'apprentissage qui fait appel aux matières du curriculum telles que l'éducation physique, les sciences naturelles, les sciences sociales et plusieurs autres matières.

AF A N D DF

Modification:

9. Education in the outdoors as a means of sharpening and deepening most children's learning.

SA A N D SD

Une éducation dans le Plein-Air comme moyen d'aviver et d'approfondir l'apprentissage de la plupart des enfants.

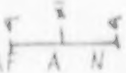
AF A N D DF

Modification:

Statement

10. As those experiences that involve enjoying, interpreting, and wisely using the natural environment in achieving at least in part, the objectives of education. SA A N D SD

Comme des expériences qui impliquent l'appréciation, l'interprétation et l'utilisation intelligente de l'environnement dans l'atteinte, du moins en partie, des objectifs de l'éducation.



AF A N D DF

Modification:

11. Any physical or recreational activity that actively brings the learner and the natural environment in close contact providing a deeper understanding and appreciation of the natural environment. SA A N D SD

Toute activité physique ou récréative qui met celui qui apprend et l'environnement naturel en rapport étroit en lui fournissant une meilleure compréhension et appréciation de l'environnement naturel.

AF A N D DF

Modification:

12. Any activity of structured or non-structured leisure by which an individual gets in contact with elements of nature. SA A N D SD

Toute activité de loisir "structurée" ou "non-structurée" par laquelle un individu prend contact avec les éléments de la nature.

AF A N D DF

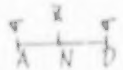
Modification:

Statement

13. Any activity with ecological concerns allowing the individual to discover, identify and analyze the natural environment, its constituent elements and interrelating elements with a conservation purpose.

SA A N D SD

Toute activité à caractère écologique permettant à l'individu de découvrir, d'identifier et d'analyser l'environnement, les éléments qui le constituent et les éléments d'interrelation, et ce, avec un but de conservation.



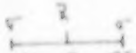
AF A N D DF

Modification:

14. Physical activities in which the individual, through sports,* gets in direct contact with the natural environment.

SA A N D SD

Activités physiques dans lesquelles l'individu, par les sports, prend contact direct avec l'environnement naturel.*



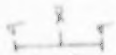
AF A N D DF

Modification:

15. Curriculum implementation through direct experiences outside the classroom.

SA A N D SD

Implantation du curriculum à travers des expériences directes en dehors de la classe.



AF A N D DF

Modification:

*"Sports" - considered in a general sense
*"Sports" - considéré dans un sens large

Statement

Learning process offering opportunities for direct experiences in the acquisition of:

16. a. Sound concepts and knowledge concerning human and natural resources. SA A N D SD

17. b. Lifetime skills permitting a creative and refreshing way of living. SA A N D SD

18. c. Positive attitudes reflecting harmony of man with nature. SA A N D SD

Un processus d'apprentissage offrant des opportunités pour des expériences directes en vue de l'acquisition de:

a. Concepts et connaissances fondamentales concernant les ressources humaines et naturelles. AF A N D DF

b. Habilités durables permettant une façon de vivre créatrice et enrichissante. AF A N D DF

c. Attitudes positives manifestant une relation harmonieuse de l'homme avec la nature. AF A N D DF

Modification:

19. (As one part of outdoor education), outdoor experiences concerning the sciences of conservation and ecology. SA A N D SD

(Comme une partie de l'éducation Plein-Air), les expériences de Plein-Air traitant des sciences de la conservation et l'écologie. AF A N D DF

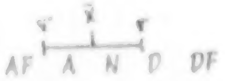
Modification:

Statement

20. Generic term for any educational program with focus upon natural environment and man's interaction with and in it.

SA A N D SD

Un terme générique pour tout programme éducationnel mettant l'accent sur l'environnement naturel et l'interaction de l'homme avec et dans celui-ci.

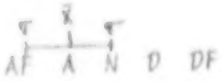


Modification:

21. Direct approach to exploration and learning which expedites maximum utilization of the natural physical environment as a learning laboratory which is living and unique.

SA A N D SD

Une approche directe pour l'exploration et l'apprentissage qui active l'utilisation maximumde l'environnement physique, naturel comme un laboratoire d'apprentissage unique et vivant.

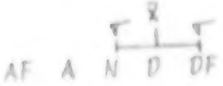


Modification:

22. Physical activities held in the out-of-doors but with health* concerns as the primary goal.

SA A N D SD

Activités physiques dans le Plein-Air orientées vers des préoccupations de santé physique, comme premier but.



Modification:

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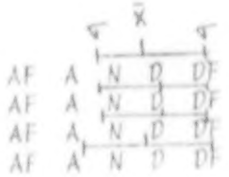
* = "physical fitness"

Statement

Outdoor Education is a subject matter oriented toward: (uni-disciplinary approach with specific content other than history and principles of Outdoor Education)

23. a. Elementary (grade 1 to 6). SA A N D SD
24. b. Secondary (grade 7 to 12). SA A N D SD
25. c. College level. SA A N D SD
26. d. Adult education. SA A N D SD

L'éducation Plein-Air est considérée comme une matière au niveau: (approche uni-disciplinaire avec contenu spécifique autre que histoire, principes de l'éducation Plein-Air)



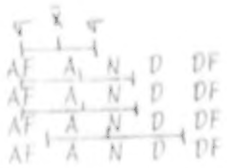
a. *élémentaire.* AF A N D DF
b. *secondaire.* AF A N D DF
c. C.E.G.E.P. AF A N D DF
d. *Éducation permanente.* AF A N D DF

Modification:
N.B. as opposed to no. 17

Outdoor Education is a multi-disciplinary learning process oriented toward:

27. a. Elementary (grade 1 to 6). SA A N D SD
28. b. Secondary (grade 7 to 12). SA A N D SD
29. c. College level. SA A N D SD
30. d. Adult education. SA A N D SD

L'éducation Plein-Air est un processus d'apprentissage multi-disciplinaire, au niveau:



a. *élémentaire.* AF A N D DF
b. *secondaire.* AF A N D DF
c. C.E.G.E.P. AF A N D DF
d. *Éducation permanente.* AF A N D DF

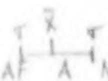
Modification:

Statement

31. As a means of curriculum enrichment, in a setting that enhances learning and provides for direct experiences and the opportunity for solving real-life problems. It cuts across the subject matter areas and is best used by the teacher as a planned part of the learning process.

SA A N D SD

Comme un moyen d'enrichissement du curriculum, dans un milieu qui approfondit l'apprentissage et prévoit des expériences directes et aussi l'opportunité de résoudre des problèmes concrets de la vie. Elle entrecoupe toutes les matières et est mieux utilisée par les professeurs comme une partie planifiée du processus d'apprentissage.



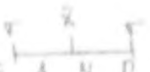
AF A N D DF

Modification:

32. (Starting from the basis of "CURRICULUM," as that which happened to a child or learner as opposed to subject matter or content taught), as a means to implement the curriculum in a way determined by the appropriate content of the moment when and where it provides the best fit for the child's needs and interests.

SA A N D SD

(Partant sur la base du "CURRICULUM," tel que ce qui s'est passé chez celui qui apprend ou l'enfant par opposition à la matière ou contenu enseigné), un moyen de mettre en pratique le curriculum, déterminé d'une certaine façon par un contenu adéquat, du moment où et quand cela convient le mieux pour les intérêts et besoins de l'enfant.



AF A N D DF

Modification:

Statement

33. Educational process coming from a series of organized activities being held generally in a natural or semi-natural setting, based on the potential offered by the natural setting and contributing to the physical and psychic development of the individual, increasing his level of awareness of his inter-relations with nature, and also capable of modifying his attitudes and behavior toward the natural environment. SA A N D SD

Un processus éducatif dérivant d'un ensemble d'activités organisées se déroulant dans la nature basées sur l'exploitation du potentiel offert par le milieu naturel et contribuant au développement de l'individu tant sur le plan physique que psychique, tout en accroissant son degré de conscience de ses inter-relations avec la nature, et susceptibles de modifier ses attitudes et comportements vis-à-vis du milieu naturel.* AF A N D DF

Modification: ____

---

* = "*généralement*"

PART II: OBJECTIVES OF OUTDOOR EDUCATION

PARTIE II: OBJECTIFS DE L'EDUCATION PLEIN-AIR

In your view, what SHOULD BE one of the general objectives of Outdoor Education?

Selon vous, quels devraient être quelques-uns des objectifs généraux de l'éducation Plein-Air (éducatifs et pédagogiques)?

Statement

34. Provide unique opportunities for behavioral changes because of the particular setting offered by the out-of-doors.

SA A N D SD

Fournir des occasions uniques pour des changements de comportements à cause de l'environnement particulier qu'offre le Plein-Air.

AF A N D DF

Modification:

35. Help to use wisely and protect the natural environment.

SA A N D SD

Aider à utiliser judicieusement et protéger l'environnement naturel.

AF A N D DF

Modification:

36. Provide outdoor settings that will make teaching more creative.

SA A N D SD

Fournir des situations de Plein-Air qui rendront l'enseignement plus créateur.

AF A N D DF

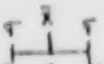
Modification:

Statement

37. Utilize surroundings and community resources for education, to the best advantage of the curriculum.

SA A N D SD

Utiliser les ressources environnantes de l'école et de la communauté pour fins éducatives, au meilleur avantage du curriculum.



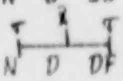
AF A N D DF

Modification:

38. (All objectives of Outdoor Education are) the same as for Physical Education.

SA A N D SD

(Tous les objectifs du Plein-Air sont) les mêmes que ceux de l'éducation physique.



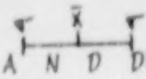
AF A N D DF

Modification:

39. Help the individual to relate with his environment through different physical exercises.*

SA A N D SD

*Aider l'individu à se mettre en rapport avec son environnement par le biais des différents exercices physiques.**



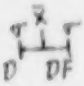
AF A N D DF

Modification:

40. Organic and muscular development of the individual through Physical Education activities and sports in natural settings as primary goal.

SA A N D SD

Comme premier objectif, le développement organique et musculaire de l'individu à travers les sports et les activités de l'éducation physique effectuées dans les sites naturels.



AF A N D DF

Modification:

* = "physical education exercises"

Statement

41. Help students to discover the important relationship that can and should exist between classroom instruction and outdoor learning. SA A N D SD

Aider les étudiants à découvrir la relation importante qui peut et qui doit exister entre l'apprentissage en classe et l'apprentissage en milieu naturel. AF A N D DF

Modification:

42. Provide an opportunity for direct learning experiences which foster implementation of the school curriculum in many areas. SA A N D SD

Fournir une occasion pour des expériences directes d'apprentissage afin de favoriser l'approfondissement de plusieurs sujets du curriculum scolaire. AF A N D DF

Modification:

43. Enable students to develop new (outdoor) skills and interests, and provide a basis for a lifetime of meaningful living. SA A N D SD

Rendre les étudiants capables de développer de nouvelles habiletés et nouveaux intérêts et fournir une base pour une façon de vivre plus enrichissante. AF A N D DF

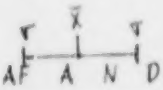
Modification:

Statement

44. Contribute to the establishment of better relations between teachers and students through direct outdoor experiences.

SA A N D SD

Contribuer à l'établissement de meilleures relations entre professeurs et élèves à travers des expériences directes en Plein-Air.



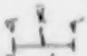
AF A N D DF

Modification:

45. Provide a context for the child's socialization to occur by giving him additional opportunities for social group life.

SA A N D SD

Fournir un contexte de socialisation pour l'enfant en lui offrant des chances additionelles de vie sociale intense au sein d'un groupe.



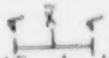
AF A N D DF

Modification:

46. To develop awareness, appreciation and understanding of the natural environment and man's relation to it.

SA A N D SD

Développer la conscience, l'appréciation et la compréhension de l'environnement naturel et la relation de l'homme avec celui-ci.



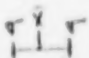
AF A N D DF

Modification:

47. To help realize, through Outdoor Education, the full potential of the individual toward optimum development of the mind, body and spirit.

SA A N D SD

Aider à réaliser, à travers l'éducation Plein-Air, tout le potentiel de l'individu vers un développement complet de l'esprit, du corps et de l'âme.



AF A N D DF

Modification:

Statement

48. Provide a meaningful setting for the development of the affective domain.

SA A N D SD

Fournir un milieu très favorable au développement affectif de l'individu.

[✓ AF] A N D DF

Modification:

49. Provide the individual with unique opportunities to develop his creativity and his initiative.

SA A N D SD

Fournir à l'individu des occasions uniques de développer son esprit de créativité et d'initiative dans un contexte significatif.

[✓ AF] A N D DF

Modification:

50. Provide an opportunity for "relief" from the boredom, drudgery and routine of many learning and teaching situations.

SA A N D SD

Fournir une opportunité de "soupape" a l'ennui, la lassitude et la routine de plusieurs situations d'apprentissage et d'enseignement.

AF A N D DF

Modification:

PART III: CULTURAL AND SOCIAL ENVIRONMENT

PARTIE III: *ENVIRONNEMENT SOCIAL ET CULTUREL*

Do you agree with the following statements concerning the cultural and social values of the society?

Est-ce que vous êtes d'accord avec les énoncés suivants concernant les valeurs sociales et culturelles suivantes?

Statement

51. Urbanization has deprived children of close contact with the land.

SA A N D SD

L'urbanisation a dépourvu les enfants d'un contact étroit avec la terre.

AF A N D DF

Modification:

52. Automation and mechanization have dulled creative energy of many young people.

SA A N D SD

L'automation et la mécanisation ont contribué à diminuer l'énergie créatrice de beaucoup de nos jeunes gens.

AF A N D DF

Modification:

53. There has been an increase in interest and use of the outdoors for relaxation and stabilization of body and mind.

SA A N D SD

Il y a eu une augmentation dans l'intérêt et l'utilisation du Plein-Air pour la relaxation et la stabilisation du corps et de l'esprit.

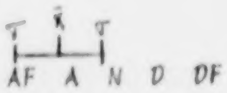
AF A N D DF

Modification:

Statement

54. There is a widespread lack of knowledge and appreciation and skill for participation in meaningful outdoor experiences. SA A N D SD

Il y a un vaste manque de connaissances et d'habileté pour la participation à des expériences enrichissantes en Plein-Air.



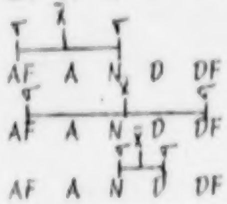
Modification:

55. Modern society has increased the need for mental and physical fitness, SA A N D SD

56. --for regaining contact with basic realities found in nature, SA A N D SD

57. --for more creative living, and for spiritual satisfactions. SA A N D SD

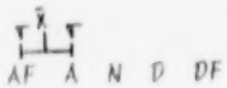
La société moderne a augmenté le besoin pour la bonne forme physique et mentale,
--pour reprendre contact avec les réalités fondamentales trouvées dans la nature,
--pour une vie plus enrichissante et pour des satisfactions spirituelles.



Modification:

58. In any social setting, man has the need to live peaceably with others and with nature, and to develop tolerance, self-reliance, and understanding. SA A N D SD

Dans un contexte social, l'homme a besoin de vivre en paix avec les autres et avec la nature; il a aussi besoin de développer de la tolérance, de la confiance en soi et de la compréhension.

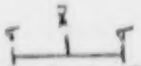


Modification:

Statement

59. A free public education for all children is important in society, and the school should act as an agent for fostering the development of the individual to his fullest potential as well as for fostering democratic values and passing on the cultural heritage. SA A N D SD

Une éducation publique gratuite est importante dans notre société et l'école devrait agir comme un agent pour favoriser le développement des potentialités d'un individu aussi pour l'épanouissement des valeurs démocratiques et la transmission de l'héritage culturel.



AF A N D SD

Modification:

60. The natural environment setting constitutes a "relief" for the individual who often cannot, in his everyday life, find relaxation and peace. SA A N D SD

Le contexte de l'environnement naturel sert de "soupape" pour l'individu qui souvent ne peut, à travers son quotidien, trouver matière à détente et paix. AF A N D DF

Modification:

61. Experiences of outdoor living can develop an appreciation for the life style of native inhabitants, colonists and explorers of the land. SA A N D SD

Les experiences de vie au grand air peuvent développer une appréciation pour le style de vie des groupes ethniques, des premiers colons et des explorateurs du pays. AF A N D DF

Modification:

PART IV: OUTDOOR EDUCATION/LEARNING

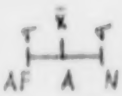
PARTIE IV: EDUCATION PLEIN-AIR/APPRENTISSAGE

Statement

62. The nature of man is such that he has a need for non-artificial environment and cannot be separated from it; to separate him causes continuous pressures.

SA A N D SD

La nature de l'homme est telle, qu'en général, il a besoin d'un environnement non-artificiel dont il ne peut pas être séparé; l'en priver cause des pressions continuelles.



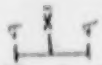
AF A N D DF

Modification:

63. Most children and youth can be described as tending to be adventurous, exploratory minded, active, energetic and curious.

SA A N D SD

La plupart des enfants et adolescents peuvent être décrits comme étant actifs, énergiques, curieux, jouissant d'un esprit d'exploration et d'aventure.



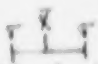
AF A N D DF

Modification:

64. Most children possess a natural yearning for the active outdoor life and respond readily and happily to it.

SA A N D SD

La plupart des enfants possèdent un penchant naturel pour une vie active en Plein-Air et réagissent d'emblée et agréablement à celle-ci.



AF A N D DF

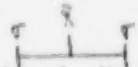
Modification:

Statement

65. Most methods (methodology) used in Outdoor Education provide motivation for learning.

SA A N D SD

La plupart des méthodes utilisées dans l'enseignement en Plein-Air favorisent le développement d'une motivation.*



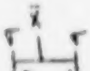
AF A N D DF

Modification:

66. The outdoors can be approached through discovery, exploration, adventure, and research in which there is intense interest in activities that are natural to children and problem solving is used in the context of natural settings.

SA A N D SD

Le Plein-Air peut être approché à travers la découverte, l'exploration et l'aventure, et la recherche dans laquelle il y a un intérêt intense dans les activités qui sont naturelles pour les enfants; aussi, la méthode de résolution de problèmes est employée dans le contexte de sites naturels.



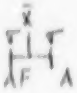
AF A N D DF

Modification:

67. Develop the "self-concept" of the individual through all kinds of outdoor settings demanding continuous adaptations.

SA A N D SD

Developper le "moi" de l'individu par toutes sortes de situations de Plein-Air exigeant des adaptations continuelles.



AF A N D DF

Modification:

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* *"la méthodologie"*

Statement

68. There is an "open/free" atmosphere in outdoor experiences in which teacher/pupil rapport develops and allows students to become actively involved in planning with the teacher for learning experiences. SA A N D SD

L'atmosphère particulière dans les expériences de Plein-Air peut améliorer le rapport professeur-élève et permet aux étudiants de devenir directement impliqués avec les professeurs dans la planification des expériences d'apprentissage. AF A N D DF

Modification:

Man is part of nature and continuous with nature. His flexibility and adaptability permit him to survive in widely differing environments, both physical and cultural. In many cases, SA A N D SD

69. --humans have to re-learn how to live in a natural versus artificial environment, SA A N D SD

70. 71. --live better in urban environments. SA A N D SD

L'homme est partie intégrante et continue de la nature. Sa flexibilité et son adaptabilité lui permettent de survivre dans des environnements très différents, à la fois physiques et culturels. Dans plusieurs cas, le humains ont à réapprendre AF A N D DF

--comment vivre dans un environnement naturel versus un environnement artificiel, AF A N D DF

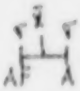
--à mieux vivre dans les environnements urbains. AF A N D DF

Modification:

Statement

72. Outdoor Education provides for the integration of learning in a setting that allows creative teaching with opportunities of acquiring specific skills and knowledge. SA A N D SD

L'Éducation Plein-Air favorise l'intégration de l'apprentissage dans une situation qui permet un enseignement créateur, avec des opportunités pour l'acquisition d'habiletés et et de connaissances spécifiques.

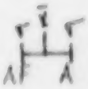


AF A N D DF

Modification:

73. Students can become actively involved in planning for outdoor learning experiences; this may increase student-teacher rapport. SA A N D SD

Les étudiants peuvent devenir activement impliqués dans la planification des expériences d'apprentissage de Plein-Air, ceci peut améliorer le rapport élève/professeur.

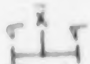


AF A N D DF

Modification:

74. The multisensory approach of tasting, looking, smelling, hearing, and touching provides direct learning experience that should be used in the out-of-doors. SA A N D SD

La méthode multi-sensorielle de l'odorat, de la vue, de l'ouïe et du toucher procure une expérience directe d'apprentissage qui devrait être utilisé en Plein-Air.



AF A N D DF

Modification:

PART V: OUTDOOR EDUCATION/TEACHER EDUCATION/CURRICULUM

PARTIE V: *EDUCATION PLEIN-AIR/FORMATION DES MAITRES/CURRICULUM*

Statement

75. Based on the premise that Outdoor Education is a multi-disciplinary learning process, Outdoor Education should be included in teacher education curricula. SA A N D SD

En nous basant sur la prémisse que l'éducation Plein-Air est un processus d'apprentissage multi-disciplinaire, l'éducation Plein-Air devrait être incluse dans les programmes de formation des maîtres.

σ $\bar{x}$ σ

AF A N D DF

Modification:

In an Outdoor Education curriculum, primary emphasis should be placed upon; also rank from 1 to 5 or more, 1 being the most important:*

		Rank:	
76.	a. Knowledge (know).	81 ☐	SA A N D SD
77.	b. Outdoor skills (know how).	82 ☐	SA A N D SD
78.	c. Attitude (know how to be).	83 ☐	SA A N D SD
79.	d. Affective domain.	84 ☐	
80.	e. Methodology of instruction.	85 ☐	SA A N D SD

*Dans un curriculum en éducation Plein-Air, l'emphase principale devrait être placée sur les points suivants; aussi les classer par ordre de priorité, 1 étant le plus important:**

σ $\bar{x}$ σ

	Rang:	
a. connaissances (savoir).	☐	*AF A N D DF*
b. habiletés de Plein-Air (savoir faire).	☐	*AF A N D DF*
c. attitudes (savoir être).	☐	*AF A N D DF*
d. domaine affectif.	☐	*AF A N D DF*
e. méthodologie d'instruction.	☐	*AF A N D DF*

Modification:

---

* Use each rank number only once.

* *Utiliser chaque rang une fois seulement.*

Statement

The role of the teacher in Outdoor Education in public schools should be; also rank each of the following from 1 to 5 or more, 1 being the most important:*

		Rank:						
86.	a. Teaching.	92 ☐	SA	A	N	D	SD
87.	b. Leadership.	93 ☐	SA	A	N	D	SD
88.	c. Administration.	94 ☐	SA	A	N	D	SD
89.	d. Evaluation.	95 ☐	SA	A	N	D	SD
90.	e. Public relations agent.	96 ☐	SA	A	N	D	SD
91.	f. "Catalysing" agent.	97 ☐	SA	A	N	D	SD

*Les tâches de l'éducateur de Plein-Air dans nos écoles devraient être les suivantes; aussi classer par ordre de priorité, 1 étant la plus importante:**

	Rang:					
a. enseignement.	☐	AF	A	N	D	DF
b. animation.	☐	AF	A	N	D	DF
c. administration.	☐	AF	A	N	D	DF
d. évaluation.	☐	AF	A	N	D	DF
e. agent de relations publiques.	☐	AF	A	N	D	DF
f. agent "catalyseur".	☐	AF	A	N	D	DF

Modification: ____________________

* Use each rank number only once in the box provided.

* *Utiliser chaque rang une fois seulement dans l'espace approprié.*

☐ = I would like to receive the results of the study when available and also a copy of the list of participants.

☐ = *Je désire recevoir les résultats de l'étude, lorsque ceux-ci seront disponibles ainsi que la liste des participants à l'étude.*

PLEASE: Answer ALL questions, according to directions.

S.V.P.: Répondre à toutes les questions selon les directives indiquées.

"Pleinairement vôtre"

Merci. Thank you.

APPENDIX C

RESEARCH INSTRUMENT

APPENDIX C

RESEARCH INSTRUMENT

QUESTIONNAIRE "DELPHI" Date:________________

Name of respondent________________________ Tel.:________________

Address____

Agency & Title____

Specialization____

DIRECTIONS:

*Evaluate each statement according to the following:

SA: You "strongly agree" with the statement

A: You "agree" with the statement

D: You "disagree" with the statement

SD: You "strongly disagree" with the statement

N: You are "neutral" or "undecided"

**Please CIRCLE the appropriate letter indicating the strength of your agreement or disagreement with the statements below.

Also, if you cannot subscribe to the wording or the meaning of the statement, write the modification in the blank provided.

PART I: DEFINITION OF OUTDOOR EDUCATION

PARTIE I: DEFINITION DE L'EDUCATION PLEIN-AIR

In your view, Outdoor Education should be defined as: "the" or "one of the" definition(s)...each definition should be considered as a whole by itself and exclusively.

Selon votre opinion, l'Education Plein-Air devrait être définie comme: "la" or "une des" définition(s)...chaque définition doit être considérée comme un tout en soi et isolément.

Statement

1. Learning in the Outdoors.* SA A N D SD
*L'apprentissage dans le Plein-Air.** AF A N D DF

Modification:

2. Learning for the Outdoors. SA A N D SD
L'apprentissage pour le Plein-Air. AF A N D DF

Modification:

3. Learning through the Outdoors. SA A N D SD
L'apprentissage par le Plein-Air. AF A N D DF

Modification:

4. Learning about the Outdoors. SA A N D SD
L'apprentissage au sujet du Plein-Air. AF A N D DF

Modification:

5. Learning in and for the outdoors. SA A N D SD
L'apprentissage dans et pour le Plein-Air. AF A N D DF

Modification:

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*"Outdoors" = "Physical environment outside the classroom"
**"Plein-Air" = "Milieu physique en dehors de la classe"*

Statement

6. Learning in, for, through and about the Outdoors. SA A N D SD

Apprentissage dans, pour, par et au sujet du Plein-Air. AF A N D DF

Modification:

7. Curriculum supplement that facilitates and enhances learning/teaching. SA A N D SD

Une méthode d'enseignement qui facilite et enrichit l'apprentissage. AF A N D DF

Modification:

8. Learning process that cuts across the school curriculum offerings, through physical education, natural sciences, social sciences and many other subject matters. SA A N D SD

Un processus d'apprentissage qui fait appel aux matières du curriculum telles que l'éducation physique, les sciences naturelles, les sciences sociales et plusieurs autres matières. AF A N D DF

Modification:

9. Education in the outdoors as a means of sharpening and deepening most children's learning. SA A N D SD

Une éducation dans le Plein-Air comme moyen d'aviver et d'approfondir l'apprentissage de la plupart des enfants. AF A N D DF

Modification:

Statement

10. As those experiences that involve enjoying, interpreting, and wisely using the natural environment in achieving at least in part, the objectives of education. SA A N D SD

Comme des expériences qui impliquent l'appréciation, l'interprétation et l'utilisation intelligente de l'environnement dans l'atteinte, du moins en partie, des objectifs de l'éducation. AF A N D DF

Modification:

11. Any physical or recreational activity that actively brings the learner and the natural environment in close contact providing a deeper understanding and appreciation of the natural environment. SA A N D SD

Toute activité physique ou récréative qui met celui qui apprend et l'environnement naturel en rapport étroit en lui fournissant une meilleure compréhension et appréciation de l'environnement naturel. AF A N D DF

Modification:

12. Any activity of structured or non-structured leisure by which an individual gets in contact with elements of nature. SA A N D SD

Toute activité de loisir "structurée" ou "non-structurée" par laquelle un individu prend contact avec les éléments de la nature. AF A N D DF

Modification:

Statement

13. Any activity with ecological concerns allowing the individual to discover, identify and analyze the natural environment, its constituent elements and interrelating elements with a conservation purpose. SA A N D SD

Toute activité à caractère écologique permettant à l'individu de découvrir, d'identifier et d'analyser l'environnement, les éléments qui le constituent et les éléments d'interrelation, et ce, avec un but de conservation. AF A N D DF

Modification:

14. Physical activities in which the individual, through sports,* gets in direct contact with the natural environment. SA A N D SD

Activités physiques dans lesquelles l'individu, par les sports, prend contact direct avec l'environnement naturel.* AF A N D DF

Modification:

15. Curriculum implementation through direct experiences outside the classroom. SA A N D SD

Implantation du curriculum à travers des expériences directes en dehors de la classe. AF A N D DF

Modification:

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*"Sports" = considered in a general sense

**"Sports" = considéré dans un sens large*

Statement

Learning process offering opportunities for direct experiences in the acquisition of:

16. a. Sound concepts and knowledge concerning human and natural resources. SA A N D SD

17. b. Lifetime skills permitting a creative and refreshing way of living. SA A N D SD

18. c. Positive attitudes reflecting harmony of man with nature. SA A N D SD

Un processus d'apprentissage offrant des opportunités pour des expériences directes en vue de l'acquisition de:

a. Concepts et connaissances fondamentales concernant les ressources humaines et naturelles. AF A N D DF

b. Habilités durables permettant une façon de vivre créatrice et enrichissante. AF A N D DF

c. Attitudes positives manifestant une relation harmonieuse de l'homme avec la nature. AF A N D DF

Modification: ____________________

19. (As one part of outdoor education), outdoor experiences concerning the sciences of conservation and ecology. SA A N D SD

(Comme une partie de l'éducation Plein-Air), les expériences de Plein-Air traitant des sciences de la conservation et l'écologie. AF A N D DF

Modification: ____________________

Statement

20. Generic term for any educational program with focus upon natural environment and man's interaction with and in it. SA A N D SD

Un terme générique pour tout programme éducationnel mettant l'accent sur l'environnement naturel et l'interaction de l'homme avec et dans celui-ci. AF A N D DF

Modification:

21. Direct approach to exploration and learning which expedites maximum utilization of the natural physical environment as a learning laboratory which is living and unique. SA A N D SD

Une approche directe pour l'exploration et l'apprentissage qui active l'utilisation maximum de l'environnement physique, naturel comme un laboratoire d'apprentissage unique et vivant. AF A N D DF

Modification:

22. Physical activities held in the out-of-doors but with health* concerns as the primary goal. SA A N D SD

Activités physiques dans le Plein-Air orientées vers des préoccupations de santé physique, comme premier but. AF A N D DF

Modification:

* = "physical fitness"

Statement

Outdoor Education is a subject matter oriented toward: (uni-disciplinary approach with specific content other than history and principles of Outdoor Education)

23. a. Elementary (grade 1 to 6). SA A N D SD
24. b. Secondary (grade 7 to 12). SA A N D SD
25. c. College level. SA A N D SD
26. d. Adult education. SA A N D SD

L'éducation Plein-Air est considérée comme une matière au niveau: (approche uni-disciplinaire avec contenu spécifique autre que histoire, principes de l'éducation Plein-Air)

a. élémentaire. AF A N D DF
b. secondaire. AF A N D DF
c. C.E.G.E.P. AF A N D DF
d. éducation permanente. AF A N D DF

Modification:
N.B. as opposed to no. 17

Outdoor Education is a multi-disciplinary learning process oriented toward:

27. a. Elementary (grade 1 to 6). SA A N D SD
28. b. Secondary (grade 7 to 12). SA A N D SD
29. c. College level. SA A N D SD
30. d. Adult education. SA A N D SD

L'éducation Plein-Air est un processus d'apprentissage multi-disciplinaire, au niveau:

a. élémentaire. AF A N D DF
b. secondaire. AF A N D DF
c. C.E.G.E.P. AF A N D DF
d. éducation permanente. AF A N D DF

Modification:

Statement

31. As a means of curriculum enrichment, in a setting that enhances learning and provides for direct experiences and the opportunity for solving real-life problems. It cuts across the subject matter areas and is best used by the teacher as a planned part of the learning process.

SA A N D SD

Comme un moyen d'enrichissement du curriculum, dans un milieu qui approfondit l'apprentissage et prévoit des expériences directes et aussi l'opportunité de résoudre des problèmes concrets de la vie. Elle entrecoupe toutes les matières et est mieux utilisée par les professeurs comme une partie planifiée du processus d'apprentissage.

AF A N D DF

Modification:

32. (Starting from the basis of "CURRICULUM," as that which happened to a child or learner as opposed to subject matter or content taught),=as a means to implement the curriculum in a way determined by the appropriate content of the moment when and where it provides the best fit for the child's needs and interests.

SA A N D SD

(Partant sur la base du "CURRICULUM," tel que ce qui s'est passé chez celui qui apprend ou l'enfant par opposition à la matière ou contenu enseigné),= un moyen de mettre en pratique le curriculum, déterminé d'une certaine façon par un contenu adéquat, du moment ou et quand cela convient le mieux pour les intérets et besoins de l'enfant.

AF A N D DF

Modification:

Statement

33. Educational process coming from a series of organized activities being held generally in a natural or semi-natural setting, based on the potential offered by the natural setting and contributing to the physical and psychic development of the individual, increasing his level of awareness of his inter-relations with nature, and also capable of modifying his attitudes and behavior toward the natural environment. SA A N D SD

Un processus éducatif dérivant d'un ensemble d'activités organisées se déroulant dans la nature basées sur l'exploitation du potentiel offert par le milieu naturel et contribuant au développement de l'individu tant sur le plan physique que psychique, tout en accroissant son degré de conscience de ses inter-relations avec la nature, et susceptibles de modifier ses attitudes et comportements vis-à-vis du milieu naturel.* AF A N D DF

Modification:

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* = "*généralement*"

PART II: OBJECTIVES OF OUTDOOR EDUCATION

PARTIE II: OBJECTIFS DE L'EDUCATION PLEIN-AIR

In your view, what SHOULD BE one of the general objectives of Outdoor Education?

Selon vous, quels devraient être quelques-uns des objectifs généraux de l'éducation Plein-Air (éducatifs et pédagogiques)?

Statement

34. Provide unique opportunities for behavioral changes because of the particular setting offered by the out-of-doors. SA A N D SD

Fournir des occasions uniques pour des changements de comportements à cause de l'environnement particulier qu'offre le Plein-Air. AF A N D DF

Modification:

35. Help to use wisely and protect the natural environment. SA A N D SD

Aider à utiliser judicieusement et protéger l'environnement naturel. AF A N D DF

Modification:

36. Provide outdoor settings that will make teaching more creative. SA A N D SD

Fournir des situations de Plein-Air qui rendront l'enseignement plus créateur. AF A N D DF

Modification:

Statement

37. Utilize surroundings and community resources for education, to the best advantage of the curriculum. SA A N D SD

Utiliser les ressources environnantes de l'école et de la communauté pour fins éducatives, au meilleur avantage du curriculum. AF A N D DF

Modification: ______________________

38. (All objectives of Outdoor Education are) the same as for Physical Education. SA A N D SD

(Tous les objectifs du Plein-Air sont) les mêmes que ceux de l'éducation physique. AF A N D DF

Modification: ______________________

39. Help the individual to relate with his environment through different physical exercises.* SA A N D SD

*Aider l'individu à se mettre en rapport avec son environnement par le biais des différents exercices physiques.** AF A N D DF

Modification: ______________________

40. Organic and muscular development of the individual through Physical Education activities and sports in natural settings as primary goal. SA A N D SD

Comme premier objectif, le développement organique et musculaire de l'individu à travers les sports et les activités de l'éducation physique effectuées dans les sites naturels. AF A N D DF

Modification: ______________________

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* = "physical education exercises"

Statement

37. Utilize surroundings and community resources for education, to the best advantage of the curriculum. SA A N D SD

Utiliser les ressources environnantes de l'école et de la communauté pour fins éducatives, au meilleur avantage du curriculum. AF A N D DF

Modification: ______________________________

38. (All objectives of Outdoor Education are) the same as for Physical Education. SA A N D SD

(Tous les objectifs du Plein-Air sont) le mêmes que ceux de l'éducation physique. AF A N D DF

Modification: ______________________________

39. Help the individual to relate with his environment through different physical exercises.* SA A N D SD

*Aider l'individu à se mettre en rapport avec son environnement par le biais des différents exercices physiques.** AF A N D DF

Modification: ______________________________

40. Organic and muscular development of the individual through Physical Education activities and sports in natural settings as primary goal. SA A N D SD

Comme premier objectif, le développement organique et musculaire de l'individu à travers les sports et les activités de l'éducation physique effectuées dans les sites naturels. AF A N D DF

Modification: ______________________________

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* = "physical education exercises"

Statement

41. Help students to discover the important relationship that can and should exist between classroom instruction and outdoor learning. SA A N D SD

Aider les étudiants à découvrir la relation importante qui peut et qui doit exister entre l'apprentissage en classe et l'apprentissage en milieu naturel. AF A N D DF

Modification:

42. Provide an opportunity for direct learning experiences which foster implementation of the school curriculum in many areas. SA A N D SD

Fournir une occasion pour des expériences directes d'apprentissage afin de favoriser l'approfondissement de plusieurs sujets du curriculum scolaire. AF A N D DF

Modification:

43. Enable students to develop new (outdoor) skills and interests, and provide a basis for a lifetime of meaningful living. SA A N D SD

Rendre les étudiants capables de développer de nouvelles habiletés et nouveaux intérêts et fournir une base pour une façon de vivre plus enrichissante. AF A N D DF

Modification:

Statement

44. Contribute to the establishment of better relations between teachers and students through direct outdoor experiences.

SA A N D SD

Contribuer à l'établissement de meilleures relations entre professeurs et élèves à travers des expériences directes en Plein-Air.

AF A N D DF

Modification:

45. Provide a context for the child's socialization to occur by giving him additional opportunities for social group life.

SA A N D SD

Fournir un contexte de socialisation pour l'enfant en lui offrant des chances additionelles de vie sociale intense au sein d'un groupe.

AF A N D DF

Modification:

46. To develop awareness, appreciation and understanding of the natural environment and man's relation to it.

SA A N D SD

Développer la conscience, l'appréciation et la compréhension de l'environnement naturel et la relation de l'homme avec celui-ci.

AF A N D DF

Modification:

47. To help realize, through Outdoor Education, the full potential of the individual toward optimum development of the mind, body and spirit.

SA A N D SD

Aider à réaliser, à travers l'éducation Plein-Air, tout le potentiel de l'individu vers un développement complet de l'esprit, du corps et de l'âme.

AF A N D DF

Modification:

Statement

48. Provide a meaningful setting for the development of the affective domain. SA A N D SD

Fournir un milieu très favorable au développement affectif de l'individu. AF A N D DF

Modification: ____________________

49. Provide the individual with unique opportunities to develop his creativity and his initiative. SA A N D SD

Fournir à l'individu des occasions uniques de développer son esprit de créativité et d'initiative dans un contexte significatif. AF A N D DF

Modification: ____________________

50. Provide an opportunity for "relief" from the boredom, drudgery and routine of many learning and teaching situations. SA A N D SD

Fournir une opportunité de "soupape" a l'ennui, la lassitude et la routine de plusieurs situations d'apprentissage et d'enseignement. AF A N D DF

Modification: ____________________

PART III: CULTURAL AND SOCIAL ENVIRONMENT

PARTIE III: ENVIRONNEMENT SOCIAL ET CULTUREL

Do you agree with the following statements concerning the cultural and social values of the society?

Est-ce que vous êtes d'accord avec les énoncés suivants concernant les valeurs sociales et culturelles suivantes?

Statement

51. Urbanization has deprived children of close contact with the land. SA A N D SD

L'urbanisation a dépourvu les enfants d'un contact étroit avec la terre. AF A N D DF

Modification:

52. Automation and mechanization have dulled creative energy of many young people. SA A N D SD

l'automation et la mécanisation ont contribué à diminuer l'énergie créatrice de beaucoup de nos jeunes gens. AF A N D DF

Modification:

53. There has been an increase in interest and use of the outdoors for relaxation and stabilization of body and mind. SA A N D SD

Il y a eu une augmentation dans l'intérêt et l'utilisation du Plein-Air pour la relaxation et la stabilisation du corps et de l'esprit. AF A N D DF

Modification:

Statement

54. There is a widespread lack of knowledge and appreciation and skill for participation in meaningful outdoor experiences. SA A N D SD

Il y a un vaste manque de connaissances et d'habileté pour la participation à des expériences enrichissantes en Plein-Air AF A N D DF

Modification:

55. Modern society has increased the need for mental and physical fitness, SA A N D SD
56. --for regaining contact with basic realities found in nature, SA A N D SD
57. --for more creative living, and for spiritual satisfactions. SA A N D SD

La société moderne a augmenté le besoin pour la bonne forme physique et mentale, AF A N D DF
--pour reprendre contact avec les réalités fondamentales trouvées dans la nature, AF A N D DF
--pour une vie plus enrichissante et pour des satisfactions spirituelles. AF A N D DF

Modification:

58. In any social setting, man has the need to live peaceably with others and with nature, and to develop tolerance, self-reliance, and understanding. SA A N D SD

Dans un contexte social, l'homme a besoin de vivre en paix avec les autres et avec la nature; il a aussi besoin de développer de la tolérance, de la confiance en soi et de la compréhension. AF A N D DF

Modification:

Statement

59. A free public education for all children is important in society, and the school should act as an agent for fostering the development of the individual to his fullest potential as well as for fostering democratic values and passing on the cultural heritage. SA A N D SD

Une éducation publique gratuite est importante dans notre société et l'école devrait agir comme un agent pour favoriser le développement des potentialités d'un individu aussi pour l'épanouissement des valeurs démocratiques et la transmission de l'héritage culturel. AF A N D SD

Modification: ____________________

60. The natural environment setting constitutes a "relief" for the individual who often cannot, in his everyday life, find relaxation and peace. SA A N D SD

Le contexte de l'environnement naturel sert de "soupape" pour l'individu qui souvent ne peut, à travers son quotidien, trouver matière à détente et paix. AF A N D DF

Modification: ____________________

61. Experiences of outdoor living can develop an appreciation for the life style of native inhabitants, colonists and explorers of the land. SA A N D SD

Les experiences de vie au grand air peuvent développer une appréciation pour le style de vie des groupes ethniques, des premiers colons et des explorateurs du pays. AF A N D DF

Modification: ____________________

PART IV: OUTDOOR EDUCATION/LEARNING

PARTIE IV: EDUCATION PLEIN-AIR/APPRENTISSAGE

Statement

62.	The nature of man is such that he has a need for non-artificial environment and cannot be separated from it; to separate him causes continuous pressures.	SA A N D SD
	La nature de l'homme est telle, qu'en général, il a besoin d'un environnement non-artificiel dont il ne peut pas être séparé; l'en priver cause des pressions continuelles.	AF A N D DF

Modification: ________________________

63.	Most children and youth can be described as tending to be adventurous, exploratory minded, active, energetic and curious.	SA A N D SD
	La plupart des enfants et adolescents peuvent être décrits comme étant actifs, énergiques, curieux, jouissant d'un esprit d'exploration et d'aventure.	AF A N D DF

Modification: ________________________

64.	Most children possess a natural yearning for the active outdoor life and respond readily and happily to it.	SA A N D SD
	La plupart des enfants possèdent un penchant naturel pour une vie active en Plein-Air et réagissent d'emblée et agréablement à celle-ci.	AF A N D DF

Modification: ________________________

Statement

65. Most methods (methodology) used in Outdoor Education provide motivation for learning. SA A N D SD

La plupart des méthodes utilisées dans l'enseignement en Plein-Air favorisent le développement d'une motivation.* AF A N D DF

Modification:

66. The outdoors can be approached through discovery, exploration, adventure, and research in which there is intense interest in activities that are natural to children and problem solving is used in the context of natural settings. SA A N D SD

Le Plein-Air peut être approché à travers la découverte, l'exploration et l'aventure, et la recherche dans laquelle il y a un intérêt intense dans les activités qui sont naturelles pour les enfants; aussi, la méthode de résolution de problèmes est employée dans le contexte de sites naturels. AF A N D DF

Modification:

67. Develop the "self-concept" of the individual through all kinds of outdoor settings demanding continuous adaptations. SA A N D SD

Developper le "moi" de l'individu par toutes sortes de situations de Plein-Air exigeant des adaptations continuelles. AF A N D DF

Modification:

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* *"La méthodologie"*

Statement

68. There is an "open/free" atmosphere in outdoor experiences in which teacher/pupil rapport develops and allows students to become actively involved in planning with the teacher for learning experiences. SA A N D SD

l'atmosphère particulière dans les expériences de Plein-Air peut améliorer le rapport professeur-élève et permet aux étudiants de devenir directement impliqués avec les professeurs dans la planification des expériences d'apprentissage. AF A N D DF

Modification:

Man is part of nature and continuous with nature. His flexibility and adaptability permit him to survive in widely differing environments, both SA A N D SD
69. physical and cultural. In many cases,
70. --humans have to re-learn how to live in a natural versus artificial environment, SA A N D SD
71. --live better in urban environments. SA A N D SD

l'homme est partie intégrante et continue de la nature. Sa flexibilité et son adaptabilité lui permettent de survivre dans des environnements très différents, à la fois physiques et culturels. Dans plusieurs AF A N D DF
cas, le humains ont à réapprendre
--comment vivre dans un environnement naturel versus un environnement artificiel, AF A N D DF
--à mieux vivre dans les environnements urbains. AF A N D DF

Modification:

Statement

72. Outdoor Education provides for the integration of learning in a setting that allows creative teaching with opportunities of acquiring specific skills and knowledge.

SA A N D SD

L'éducation Plein-Air favorise l'intégration de l'apprentissage dans une situation qui permet un enseignement créateur, avec des opportunités pour l'acquisition d'habiletés et et de connaissances spécifiques.

AF A N D DF

- -

Modification:

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73. Students can become actively involved in planning for outdoor learning experiences; this may increase student-teacher rapport.

SA A N D SD

Les étudiants peuvent devenir activement impliqués dans la planification des expériences d'apprentissage de Plein-Air, ceci peut améliorer le rapport élève/professeur.

AF A N D DF

- -

Modification:

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74. The multisensory approach of tasting, looking, smelling, hearing, and touching provides direct learning experience that should be used in the out-of-doors.

SA A N D SD

La méthode multi-sensorielle de l'odorat, de la vue, de l'ouïe et du toucher procure une expérience directe d'apprentissage qui devrait être utilisé en Plein-Air.

AF A N D DF

- -

Modification:

PART V: OUTDOOR EDUCATION/TEACHER EDUCATION/CURRICULUM

PARTIE V: EDUCATION PLEIN-AIR/FORMATION DES MAITRES/CURRICULUM

Statement

75. Based on the premise that Outdoor Education is a multi-disciplinary learning process, Outdoor Education should be included in teacher education curricula. SA A N D SD

En nous basant sur la prémisse que l'éducation Plein-Air est un processus d'apprentissage multi-disciplinaire, l'éducation Plein-Air devrait être incluse dans les programmes de formation des maîtres. AF A N D DF

Modification:

In an Outdoor Education curriculum, primary emphasis should be placed upon; also rank from 1 to 5 or more, 1 being the most important:*

		Rank:						
76.	a. Knowledge (know).	81 ☐	SA	A	N	D	SD
77.	b. Outdoor skills (know how).	82 ☐	SA	A	N	D	SD
78.	c. Attitude (know how to be).	83 ☐	SA	A	N	D	SD
79.	d. Affective domain.	84 ☐					
80.	e. Methodology of instruction.	85 ☐	SA	A	N	D	SD

*Dans un curriculum en éducation Plein-Air, l'emphase principale devrait être placée sur les points suivants; aussi les classer par ordre de priorité, 1 étant le plus important:**

	Rang:					
a. connaissances (savoir).	☐	AF	A	N	D	DF
b. habiletés de Plein-Air (savoir faire).	☐	AF	A	N	D	DF
c. attitudes (savoir être).	☐	AF	A	N	D	DF
d. domaine affectif.	☐	AF	A	N	D	DF
e. méthodologie d'instruction.	☐	AF	A	N	D	DF

Modification:

---

* Use each rank number only once.

* *Utiliser chaque rang une fois seulement.*

Statement

The role of the teacher in Outdoor Education in public schools should be; also rank each of the following from 1 to 5 or more, 1 being the most important:*

			Rank:						
86.	a. Teaching.	92	☐	SA	A	N	D	SD
87.	b. Leadership.	93	☐	SA	A	N	D	SD
88.	c. Administration.	94	☐	SA	A	N	D	SD
89.	d. Evaluation.	95	☐	SA	A	N	D	SD
90.	e. Public relations agent.	96	☐	SA	A	N	D	SD
91.	f. "Catalysing" agent.	97	☐	SA	A	N	D	SD

*Les tâches de l'éducateur de Plein-Air dans nos écoles devraient être les suivantes; aussi classer par ordre de priorité, 1 étant la plus importante:**

	Rang:					
a. enseignement.	☐	*AF*	*A*	*N*	*D*	*DF*
b. animation.	☐	*AF*	*A*	*N*	*D*	*DF*
c. administration.	☐	*AF*	*A*	*N*	*D*	*DF*
d. évaluation.	☐	*AF*	*A*	*N*	*D*	*DF*
e. agent de relations publiques.	☐	*AF*	*A*	*N*	*D*	*DF*
f. agent "catalyseur".	☐	*AF*	*A*	*N*	*D*	*DF*

Modification: ______________________________

* Use each rank number only once in the box provided.
* *Utiliser chaque rang une fois seulement dans l'espace approprié.*

☐ = I would like to receive the results of the study when available and also a copy of the list of participants.

☐ = *Je désire recevoir les résultats de l'étude, lorsque ceux-ci seront disponibles ainsi que la liste des participants à l'étude.*

PLEASE: Answer ALL questions, according to directions.

S.V.P.: Répondre à toutes les questions selon les directives indiquées.

"Pleinairement vôtre"

Merci. Thank you.

APPENDIX D

LETTERS TO PARTICIPANTS

APPENDIX D

LETTERS TO PARTICIPANTS

UNIVERSITÉ LAVAL
PROGRAMME INTERDISCIPLINAIRE EN AMÉNAGEMENT DU TERRITOIRE
ET DEVELOPPEMENT REGIONAL
CITÉ UNIVERSITAIRE
QUÉBEC 10e, CANADA

December 15, 1975

My deat Colleague,

I am very glad of this opportunity asking you to answer the questionnaire prepared by my colleague Professor G.-A. Nadeau about Outdoor Education.

To succeed in his inquiry, Mr. Nadeau needs the collaboration of a number of specialists able to give him a valuable advice in issues related to outdoor education. Two aspects are namely involved in his survey, one concerns the outdoor education in the schools, another the curriculum required for the teachers training in that field.

I thank you sincerely in advance for your kind collaboration.

I was happy to meet you in Belgrade last October and hope all is going very well for you.

With best regards,

M. Maldague

Michel Maldague
Laval University
Québec, Canada.

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF ELEMENTARY AND SPECIAL EDUCATION
EAST LANSING · MICHIGAN · 48824

November 10 th, 1975

Dear Sir,

Georges-Andre Nadeau, a doctoral student in education at Michigan State University, East Lansing, Michigan, USA, is completing his Ph.D. in Outdoor Education. An important part of his doctoral dissertation is concerned with the expert opinions of outdoor educational leaders in Quebec, Canada and the United States.

Mr. Nadeau will be contacting you in the near future for your opinion regarding outdoor education in Quebec. Your expertese will contribute significantly in this study. Your cooperation is greatly appreciated.

Sincerely yours,

Shirley A. Brehm

Shirley A. Brehm, Ph.D.
Professor
Guidance Committee Chairman
and Dissertation Director

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF ELEMENTARY AND SPECIAL EDUCATION

EAST LANSING · MICHIGAN · [illegible]

Georges-Andre Nadeau, a doctoral student in education at Michigan State University, East Lansing, Michigan, USA, is completing his Ph.D. in Outdoor Education. An important part of his doctoral dissertation is concerned with the expert opinions of outdoor educational leaders in Quebec, Canada and the United States.

Mr. Nadeau will be contacting you in the near future for your opinion regarding outdoor education in Canada. Your expertese will contribute significantly in this study. Your cooperation is greatly appreciated.

Sincerely yours,

Shirley A. Brehm

Shirley A. Brehm, Ph.D.
Professor
Guidance Committee Chairman
and Dissertation Director

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF ELEMENTARY AND SPECIAL EDUCATION

EAST LANSING · MICHIGAN · 48824

November 17, 1975

Dear Sir:

Georges-Andre Nadeau, a doctoral student in education at Michigan State University, East Lansing, Michigan, USA, is completing his Ph.D. in Outdoor Education. An important part of his doctoral dissertation is concerned with the expert opinions of outdoor educational leaders in Quebec, Canada, the United States, and Europe.

Mr. Nadeau will be contacting you in the near future for your opinion regarding outdoor education in United States. Your expertese will contribute significantly in this study. Your cooperation is greatly appreciated.

Sincerely yours,

Shirley A. Brehm

Shirley A. Brehm, Ph.D.
Professor
Guidance Committee Chairman
and Dissertation Director

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF ELEMENTARY AND SPECIAL EDUCATION

EAST LANSING · MICHIGAN · 48824

November 17, 1975

Dear Sir:

Georges-Andre Nadeau, a doctoral student in education at Michigan State University, East Lansing, Michigan, USA, is completing his Ph.D. in Outdoor Education. An important part of his doctoral dissertation is concerned with the expert opinions of outdoor educational leaders in Quebec, Canada, the United States, and Europe.

Mr. Nadeau will be contacting you in the near future for your opinion regarding outdoor education in Europe. Your expertese will contribute significantly in this study. Your cooperation is greatly appreciated.

Sincerely yours,

Shirley A. Brehm, Ph.D.
Professor
Guidance Committee Chairman
and Dissertation Director

MICHIGAN·STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF ELEMENTARY AND SPECIAL EDUCATION

EAST LANSING · MICHIGAN · 48824

26 January 1976

Dear Sir,

You recently received a letter from Dr. S. Brehm, my dissertation Director, concerning research in Outdoor Education conducted as a portion of a doctoral program in Education at Michigan State University, East Lansing, Michigan.

You have been recommended to me as one who might be interested in participating in a study " *RATIONALE IN OUTDOOR EDUCATION AND IMPLICATIONS FOR PROFESSIONAL PREPARATION FOR OUTDOOR LEADERS IN QUEBEC* ".

Indeed, an important part of the study will be based upon various trends and the opinions of experts currently participating in the field of Outdoor Education in United States, Canada, Quebec and many countries of Europe.

I would like you to respond to a "DELPHI Opinionnaire" in phase I and to a follow-up "DELPHI Opinionnaire" in phase II that will result in a statistical analysis of each statement concerning the basic elements of Outdoor Education identified in "Delphi Opinionnaire I".

Experience in similar studies has shown such involvement to be both challenging and stimulating.

If you are willing to participate, you are invited to react to the statements of the "Delphi Opinionnaire I" enclosed.

Each opinionnaire should not require more than 20-25 min, of your time. I have enclosed a stamped and addressed envelope for your convenience.

Your input is vital to the study. I would appreciate return of the enclosed opinionnaire by *February 16th if possible*.

The follow-up opinionnaire II will be sent approximately two weeks after I have received all the opinionnaires I.

A total of 60 experts have been contacted in United States, Canada, Quebec and Europe. The results of the study will be available to each expert who participated in the study.

Thank you for your effort on my behalf.

Cordially,

Georges-Andre Nadeau, Ed. Sp. D.

P.S. For any information : call (517)-337-2347 (reverse charges).
or leave message at (517)-353-0695.

GAN/Enclosure

29 January 1976

Dear Sir,

You recently received a letter from Dr. S. Brehm, my dissertation Director, concerning research in Outdoor Education conducted as a portion of a doctoral program in Education at Michigan State University, East Lansing, Michigan.

You have been recommended to me as one who might be interested in participating in a study "Rationale in Outdoor Education and Implications for Outdoor Leaders".

Indeed, an important part of the study will be based upon various trends and the opinions of experts currently participating in the field of Outdoor Education and Environmental Education in United States of America, Canada, Quebec and many countries of Europe.

I would like you to respond to the short "Delphi" questionnaire that had been sent to you last December (if you did not do so) as soon as possible because there will be a follow-up questionnaire that will result in a statistical analysis of each statement concerning the basic elements of Outdoor Education identified in the first questionnaire.

Experience in similar studies has shown such involvement to be both challenging and stimulating.

I have enclosed a reply coupon stamped for returning the questionnaire by February 18th if possible.

Your input is vital to the study!

A total of 60 experts have been contacted in United States, Canada, Quebec and many countries of Europe. The results of the study will be available to each expert who participated in the study.

Please indicate : ☐ I did not receive the Questionnaire & I would like to have one.

☐ I received the Questionnaire & I am going to return it shortly.

☐ I need more information before answering the Questionnaire.

Please return this sheet as soon as possible in the stamped and addressed envelope enclosed.

Thank you for your effort on my behalf.

Cordially,

Georges-Andre Nadeau, Ed.Sp. D.

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF ELEMENTARY AND SPECIAL EDUCATION
EAST LANSING · MICHIGAN · 48824

23 février 1976

Cher Ami du Québec,

Merci d'avoir répondu d'une façon aussi complète au premier Questionnaire Delphi I. Vos commentaires furent grandement apréciés.

Le deuxième et dernier Questionnaire Delphi II est inclus. L'objectif de ce questionnaire est de recueillir vos réactions aux mêmes énoncés après que vous ayiez l'opportunité de recevoir le "feedback" des vingt-cinq (25) autres participants Québecois.

En effet, votre Questionnaire Delphi I fut analysé. Pour chaque énoncé, la distribution (σ) et la moyenne ($\bar{X}$) des réponses fournies sont indiquées dans le Questionnaire Delphi II inclus.

Vous êtes donc appelé, à la lumière du consensus de group indiqué, à porter un autre jugement et à "reconsidérer," s'il y a lieu, votre position originale de façon à en venir à un plus grand consensus de groupe.

Eu égard à certains commentaires reçus et/ou une trop grande déviation standard, des modifications ont été apportées à certains énoncés afin de forcer le consensus.

Vous êtes exhortés à répondre dans la mesure du possible selon le consensus de groupe indiqué. Si toutefois, après réflexion, vous ne pouvez souscrire au consensus donné, répondre en indiquant les raisons qui vous font diverger d'opinion.

Votre dernier apport est vital à l'étude. S.V.P. retournez le questionnaire dûment rempli pour le 12 mars si possible dans l'enveloppe affranchie incluse.

A nouveau, je vous remercie d'avoir pris le temps de répondre. J'ose croire que ce ne fut pas trop frustrant pour vous.

Un résumé des résultats des répondants Québecois, Canadiens, Américains et Européens (N=80) sera disponible pour chaque participant si désiré.

Cordialement,

G. A. Nadeau

Georges André Nadeau, Ed. Spec.

P.S. Pour information additionnelle, appelez à frais virés
1-(517)-337-2347 ou laissez le message au 1-(517)-353-0695.

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF ELEMENTARY AND SPECIAL EDUCATION

EAST LANSING • MICHIGAN • 48823

Dear Sir,

Thank you for having responded so completely to the Delphi Questionnaire I. Your comments were greatly appreciated.

The second, and final, questionnaire, Delphi II, is enclosed. The objective of this questionnaire is to determine your reactions to the same statements after you have had the opportunity to review the feedback received from the other American experts in the fields of Environmental and Outdoor Education.

Your responses to the initial Delphi questionnaire were reviewed, analyzed, and the mean ($\bar{X}$) and standard deviation (σ) computed for each statement. These data have been noted in the Delphi Questionnaire II.

In the light of the group concensus given, you are asked to re-evaluate the statements, and , if necessary, reconsider your original position in an effort to tighten the concensus. Due to respondents' comments and/or an extremely high standard deviation, certain statements have been slightly modified. Hopefully, your responses will fall within the range of opinion determined by the first questionnaire. If, however, you cannot subscribe to the given concensus, indicate your opinion by marking a response on the scale, and indicate your reasons for deviating from the norm.

Your contribution is vital to the study. If possible, please return the questionnaire by 21 April, using the stamped envelope enclosed. A summary of the final results will be made available to you. If you would like a copy, please let me know. I will be more than happy to send one.

Again, thank you for your time and effort, it is most appreciated.

Cordially,

Georges-A. Nadeau, Ed. Sp.

APPENDIX E

LIST OF PARTICIPANTS

APPENDIX E

LIST OF PARTICIPANTS

Name	Function and Institution/Agency	Function
Quebec (Group I)		
Michel Maldague	Prof., Laval Univ., Prog. Dir., Env. Mgmt.	Multi-Disc. Env. Mgt. Prog.
Jacques Pouliot	Parks Service: Outd. Act. Spec. MTCP	"*Pleine Nature*" activities
Jacques Lajeunesse	QB Bd. of Educ.: Phys. Ed. programs	Phys. Ed.: DGEES
J. F. Faubert	Adm. "*Cité des Jeunes*," Vaudreuil	Adm. & O.E.: APAPQ
Roger Gauthier	QB Bd. of Educ. (QB). Phys. Ed. consultant	Phys. Ed., Sports & O.E.
Charles Burroughs	Seigneurie Sch. Bd., consultant & teacher	Phys. Ed. Sp. & O.E. (elem.)
Jerry Fasset	Pointe-Levy Sch. Bd., teacher & consultant	Phys. Ed., Sports & O.E.
Yvon Gagnon	Teacher, Shawinigan (CEGEP).O.E. Coord. APAPQ	Phys. Ed., Sports & O.E.
Paul Ohl	QB Gov't., G. Houde Committee member: O.E.	Sports
Raynald Gagnon	"*Base de Plein-Air Pohénégamook*," director	"*Plein-Air*" & sports
Patrice Turcotte	Prof., Laval Univ., Elem. Teach. Ed. Prog. Dir.	Ecology & "*Plein-Air*"
Laval Bolduc	APAPQ: QB Phys. Ed. Assoc., Prog. Coord.	Physical Activities (Adm.)

Key: APAPQ: *Association des Professionnels de l'Activité Physique du Québec* (Quebec Association for Physical Activity Professionals).
MTCP: *Ministère du Tourisme, de la Chasse et de la Pêche.*
HCJLS: *Haut-Commissariat de la Jeunesse, Loisirs et Sports.*
DGEES: *Direction Générale de l'Enseignement Elémentaire et Secondaire.*

Name	Function and Institution/Agency	Specialty
J. C. Lafrenière	M.T.C.P.: Nature Activities Div. Dir.	Nature Activities & Adm.
Gilles Quenville	Teacher, QB Univ. at Trois-Rivières (UQTR)	Teachers' Training (Phys. Ed.)
Jean Sauvé	QB City Bd. of Educ. Phys. Ed. consultant	Phys. Ed. & Outdoor Sports
Raymond Benoit	HCJLS, Asst. Gen. Dir.	Administration
Lucie Turcotte	Asst. Prof., Laval Univ. (F.S.E.)	Camp Adm. & O.E.
Paul Pichard	Abenakis Sch. Bd., teacher & consultant	Phys. Ed., Sports & O.E.
Claude Depati	HCJLS: Outdoor Activities, Director	Administration
J. P. Audet	Ancienne-Lorette Sch. Bd., Teacher & consult.	P.E., Sports & O.E.
Jacques Levesque	Teacher, Riv. du Loup CEGEP (college level)	Outdoor Tech. & Sports
Jacques Desrosiers	HCJLS: Sports Div. Dir.	Administration
J. F. Lavigne	UQTR: Dean of Education	Adm. & Recreology
Claude Lavallée	*Fédération* QB *de Montagne* (FQPA), V.-pres.	Outdoor Sports
Jacques Auger	HCJLS: *Services de Planification*, Dir.	Economy & Natural Resources
Gerard Champigny	Instructor, Univ. of Montreal	Leisure Technician
Paul Larue	HCJLS: *Comité Org. Jeux Olymp.* (COJO)	Adm. & *Plein-Air*

Key: FSE: *Faculté des Sciences de l'Education.*
CEGEP: *Collège d'Enseignement Général et Professionel.*

Name	Function and Institution/Agency	Specialty
Canada (Group II)		
D. J. Vandenhazel	Fac. of Educ., Nipissing Univ., North Bay, Ont.	Outdoor Education
Gordon Savoy	Coordinator, Atikonan Board of Education	Outdoor Educ. & Phys. Ed.
James Smithers	Superv., Lakenead Bd. of Educ., Thunder Bay, Ont.	Outdoor Education
Morley Lee	Dir., Ontario Pioneer Camp, Port Sidney, Ont.	Outdoor Educ. & Camping
Audrey Wilson	Consultant, Bd. of Educ., Cobourg, Ont.	Outdoor Education
Colin E. Lumby	Asst.-Prof., Univ. of Calgary, Alberta	Outdoor Education
Kirk Whipper	Professor, Univ. of Toronto, Toronto	Leisure Studies & O.E.
Jim Tilsdale	Asst.-Prof., University of Windsor	Elem. Ed. & O.E.
Cliff Code	Teacher, Outdoor Education, Alberta	Outdoor Education
David Wosik	Coord. of In-Service Training, Univ. of Victoria, B.C.	Curr. Dev. & Envir. Ed.
Jack Mackenzie	Bd. of Educ., Regina, Saskatchewan	Outdoor Education
Rodney Bain	Asst.-Prof., Univ. of Western Ontario, London, Ont.	Science Education
B. Parslow	Dept. of Education, Winnipeg, Manitoba	Outdoor Education
Ted Currie	Toronto Bd. of Educ., Toronto	Outdoor Education
R. J. Pien	Prof., Queens Univ., Faculty of Educ.	Clinical Field Study, O.E. Env. Ed., Rec. & group processes
Claude Cousineau	Prof., Recreology, Univ. of Ottawa	Recreology & Outdoor Ed.
Stewart Seim	Fac. of Educ., Univ. of Winnipeg	Outdoor Ed. & Environ. Ed.
Wayne Brooks	Hastings County Bd. of Educ., Belleville, Ont.	Outdoor Education

Name	Function and Institution/Agency	Specialty
U.S.A. (Group III)		
Fred Schuette	Adm., Mott Community College, Flint, Mich.	Physical Education
Shirley Brehm	Prof., M.S.U. Dept. of Elem. & Spec. Ed.	Science Education
N. Niemeyer	Director O.E. Project, AAHPER, M.S.U.	Outdoor Rec., O.E.
Charlene Vogan	Asst. Prof., Alma College, Alma, Mich.	O.E., Elem. Ed.
G. W. Mouser	Prof., M.S.U. Dept. of Fish. & Wildlife	Conservation Ed.
P. C. George	Prof., M.S.U. Dept. of Conserv. Educ.	Conservation Ed.
Robert Hinckle	Instr., M.S.U. Dept. of Fish. & Wildlife	Fisheries & Wildlife
Don Hollums	Bloomfield Hills, Mich., Schools, Nat. Center	Outdoor Education
James Bristor	Prof., M.S.U. HPER Dept.	Outdoor Rec. & Camping
Dean B. Bennet	Center of Res. & Adv. St., Univ. of Maine	Environmental Ed.
Charles Blackman	Asst. Dean, College of Educ. & prof., M.S.U.	Curriculum
C. L. Mand	Prof., Ohio State University	Phys. Educ. & O.E.
John Hunt	Principal, Lansing Public School District	O.E. (Elementary)
John Kirk	Director, N.J. School of Conservation	Environmental Studies
George Donaldson	Prof., Lorado Taft Campus, Northern Ill. Univ.	Outdoor Teacher Ed.
Morris Wiener	Prof., Northern Illinois University	Outdoor Teacher Ed.
John Hart	Hayes Regional Arboretum, Richmond, Ind.	Env. Studies
Bill Hammerman	San Francisco State University	O.E. & Env., Camping

Key: AAHPER: American Alliance for Health, Physical Education & Recreation.

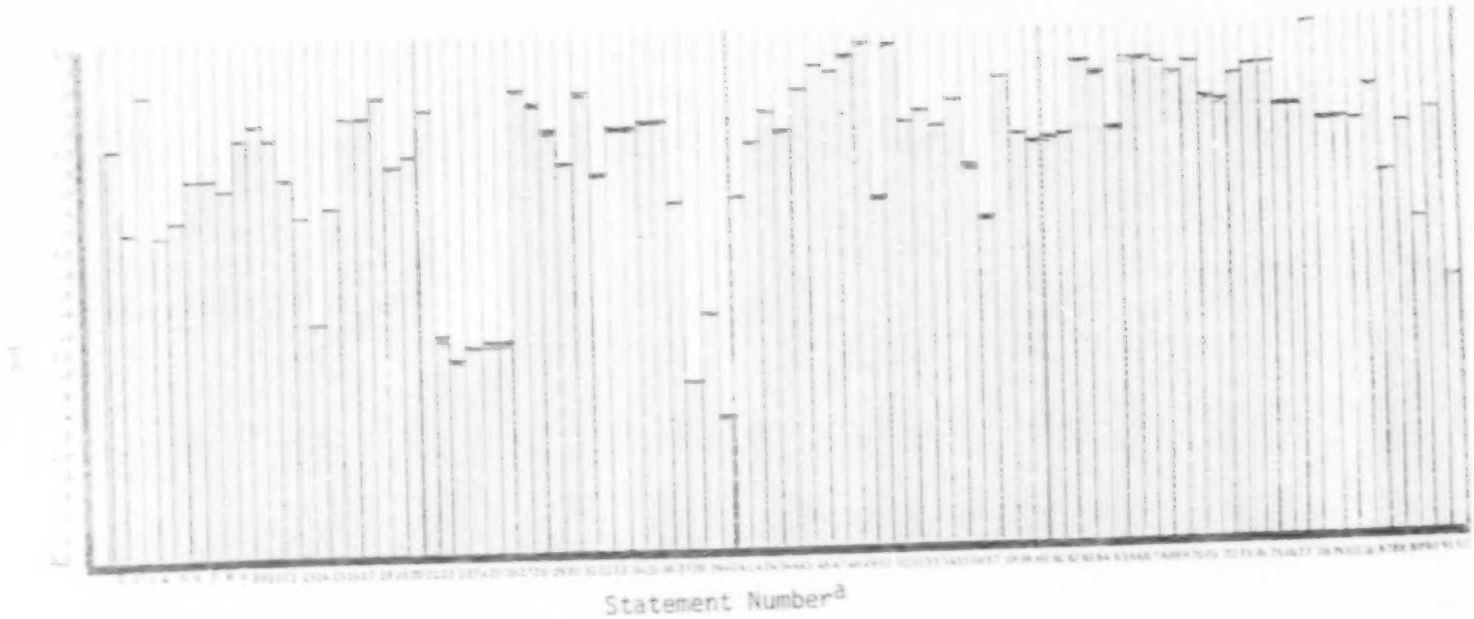
Name	Function and Institution/Agency	Specialty
John Hug	Ohio Dept. of Education, Consultant	Outdoor Education
Donald Hammerman	Prof., Lorado Taft Campus, Northern Ill. Univ.	Outdoor Teacher Ed.
Oswald Goering	Prof., Lorado Taft Campus, Northern Ill. Univ.	Outdoor Teacher Ed
Donald Maxwell	Oakland Public Schools, Consultant	Science & Outdoor Ed.
European (Group IV)		
Arthuro Eichler	Prof., Univ. of the Andes, Merida, Venezuela	Ecology & Conservation
N. W. Dobson	Senior Lecturer, Coll. of Educ., Leicester Eng.	Outdoor Pursuits & Delinquency
Jacques Lastenais	*Union Nationale des Centres Sportifs de Plein-Air* (UNCPA), France	"*Plein-Air*"
Lars Emmelin	Course Dir., Helgonavagan, Lund, Sweden	Environmental Ed.
Johannes Goodswaard	Gen. Sec., Comm. on Educ (IUCN), Rotterdam, Netherlands	Environmental Ed.
M. S. Selim	Dir., Arab Educ., Cult., Sc. Org.	Science Education
J. M. Hogan	Hon. Secr., Nat'l. Assoc. for O.E., Sheffield, United Kingdom	Outdoor Education

Key: IUCN: The International Union for Conservation of Nature and Natural Resources.

APPENDIX F

BAR GRAPHS OF RESPONSES: STATEMENTS 1-97 (MEANS AND STANDARD DEVIATIONS, PHASE II)--QUEBEC, CANADA, U.S.A., AND OVERSEAS

APPENDIX F



Key:
1-33 = Part I: Definitions of EPA/OE
34-50 = Part II: Objectives of EPA/OE
51-61 = Part III: Social and Cultural Environment
62-74 = Part IV: Learning and EPA/OE
75-97 = Part V: Teacher Education Curriculum

[a] Refer to Appendix D for complete statement.

Chart F1.--Bar graph of response means: Definitions, objectives, social and cultural environment, learning, and teacher education and EPA/OE--Quebec.

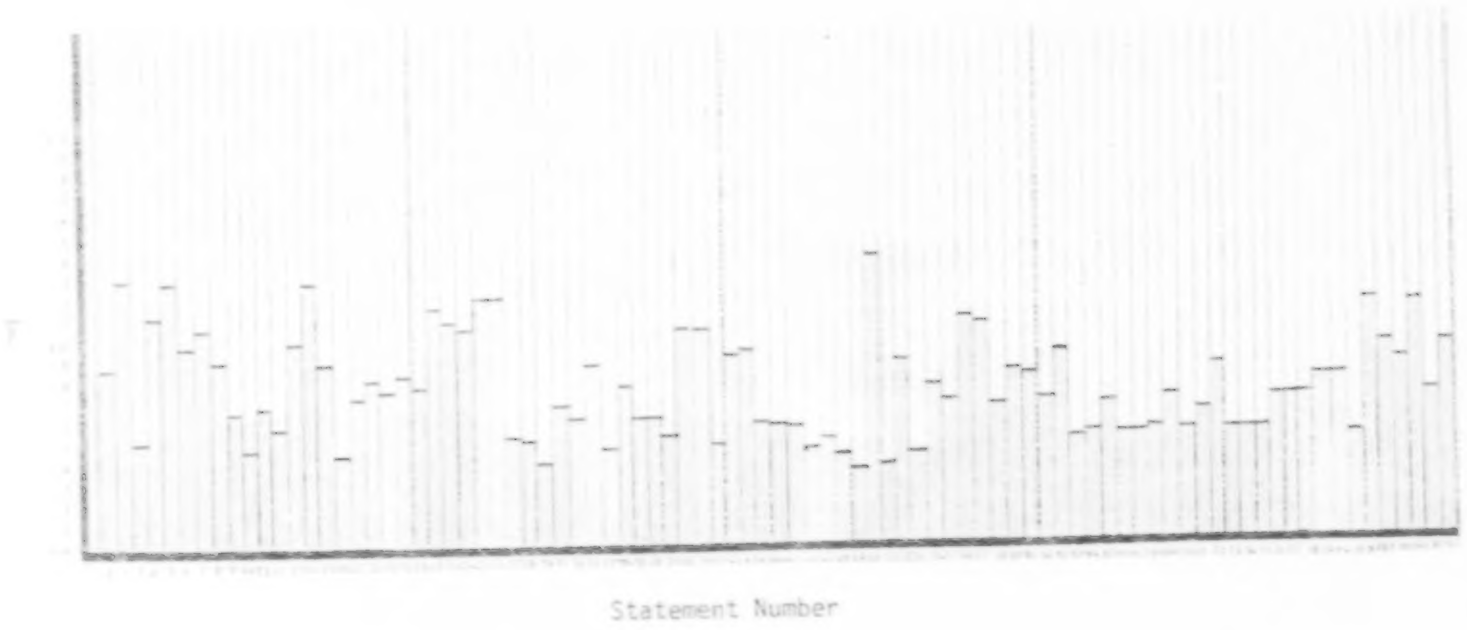
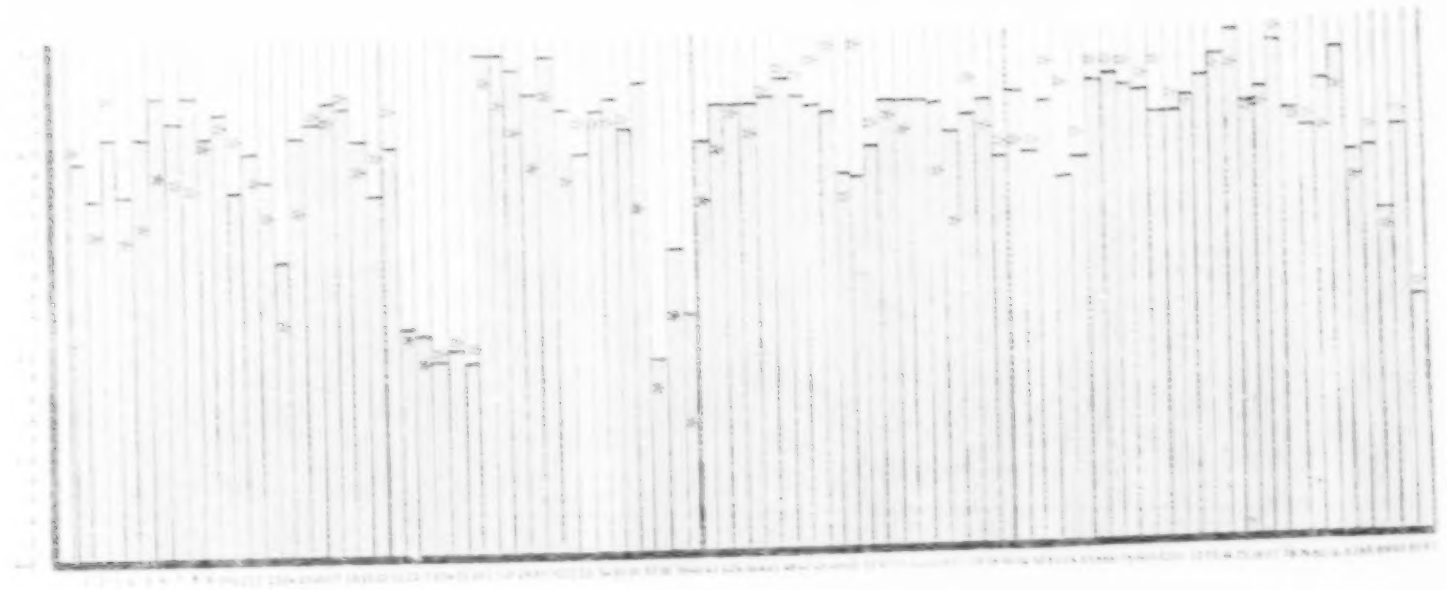


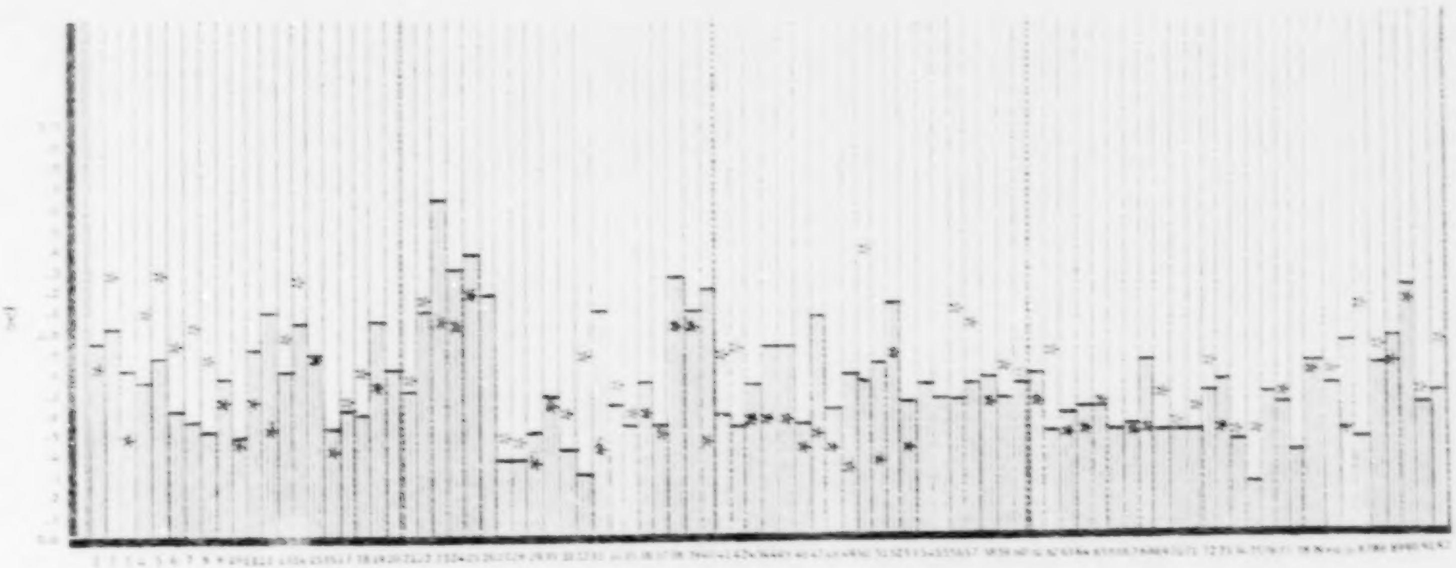
Chart F2.--Bar graph of standard deviations: Definitions, objectives, social and cultural environment, learning, and teacher education and EPA/OE--Quebec.



Statement Number

* = Means of Quebec group.

Chart F3.--Bar graph of response means: Definitions, objectives, social and cultural environment, learning, and teacher education and EPA/OE--Canada.



Statement Number

* = Standard deviations of Quebec group.

Chart F4.--Bar graph of standard deviations: Definitions, objectives, social and cultural environment, learning, and teacher education and EPA/OE--Canada.

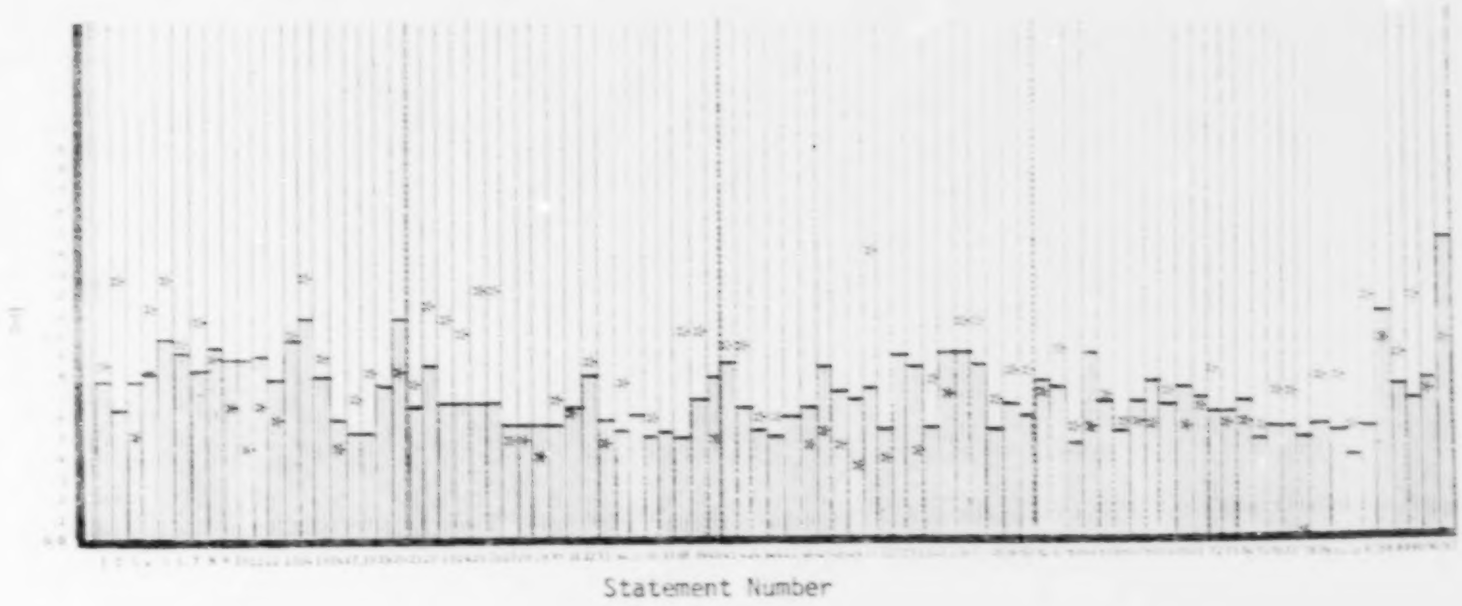


Chart F5.--Bar graph of response means: Definitions, objectives, social and cultural environment, learning, and teacher educationand EPA/OE--U.S.A.

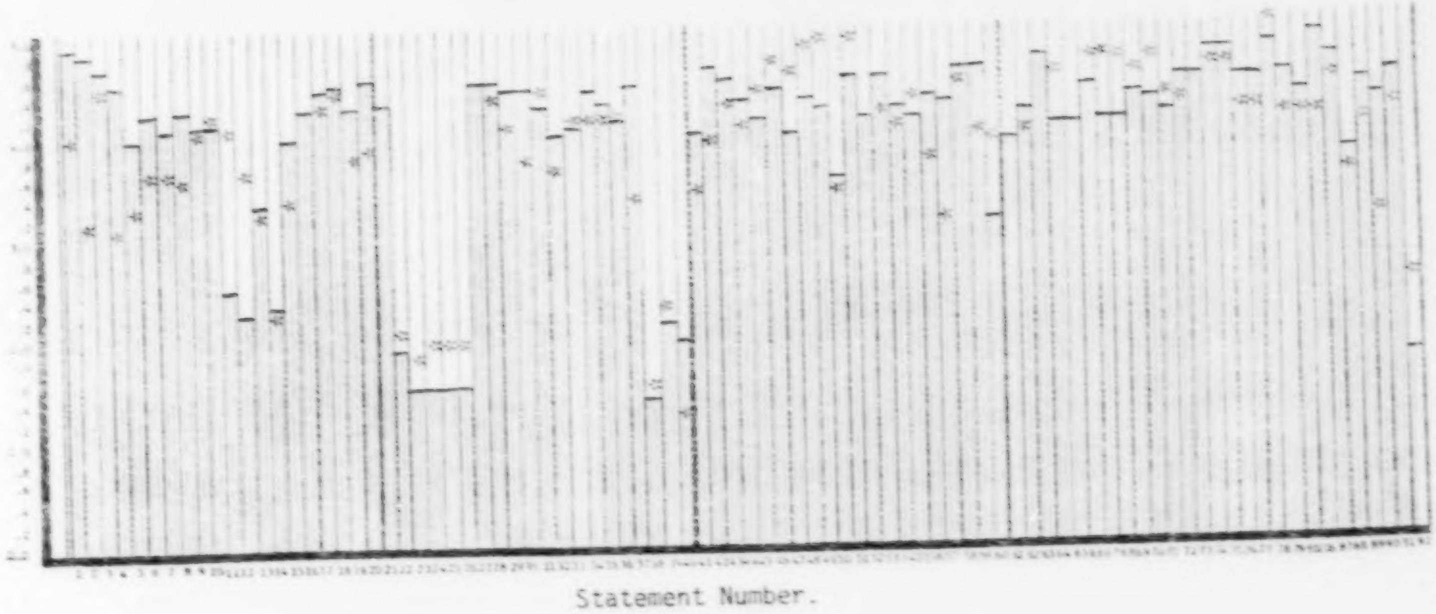
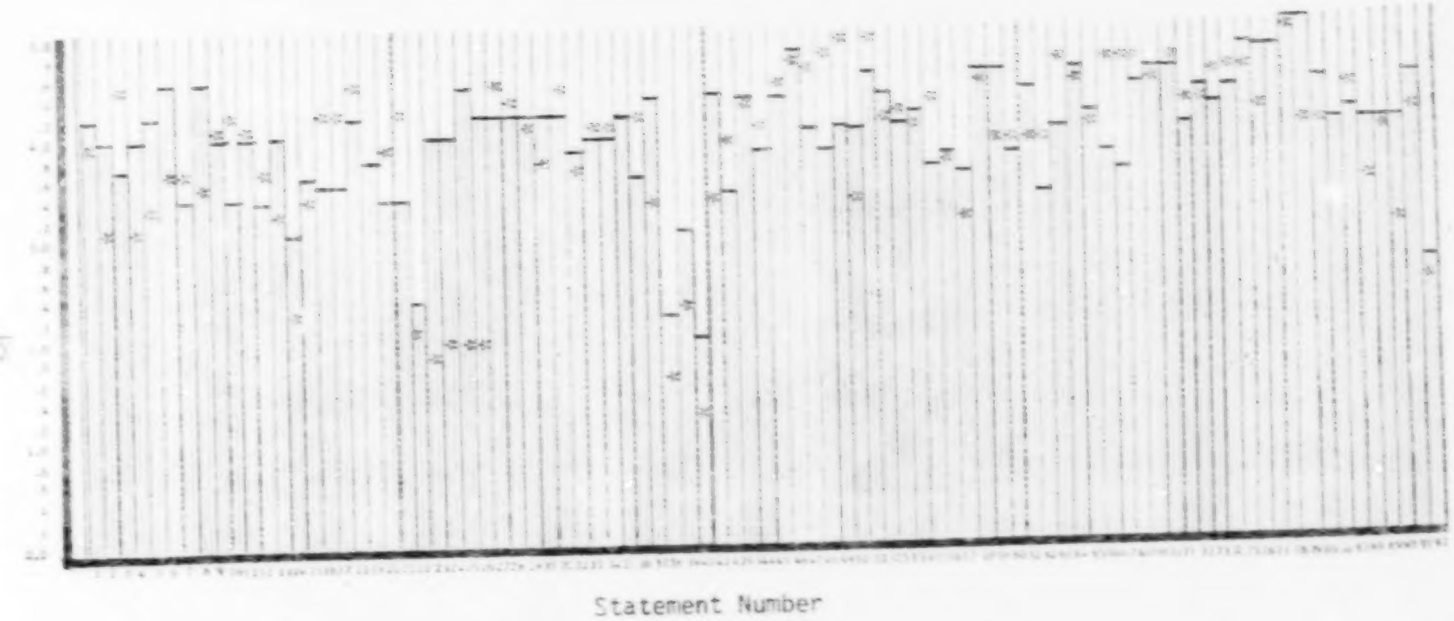


Chart F6.--Bar graph of standard deviations: Definitions, objectives, social and cultural environment, learning, and teacher education and EPA/OE--U.S.A.



Graph F7.--Bar graph of response means: Definitions, objectives, social and cultural environment, learning, and teacher education and EPA/OE--Overseas.

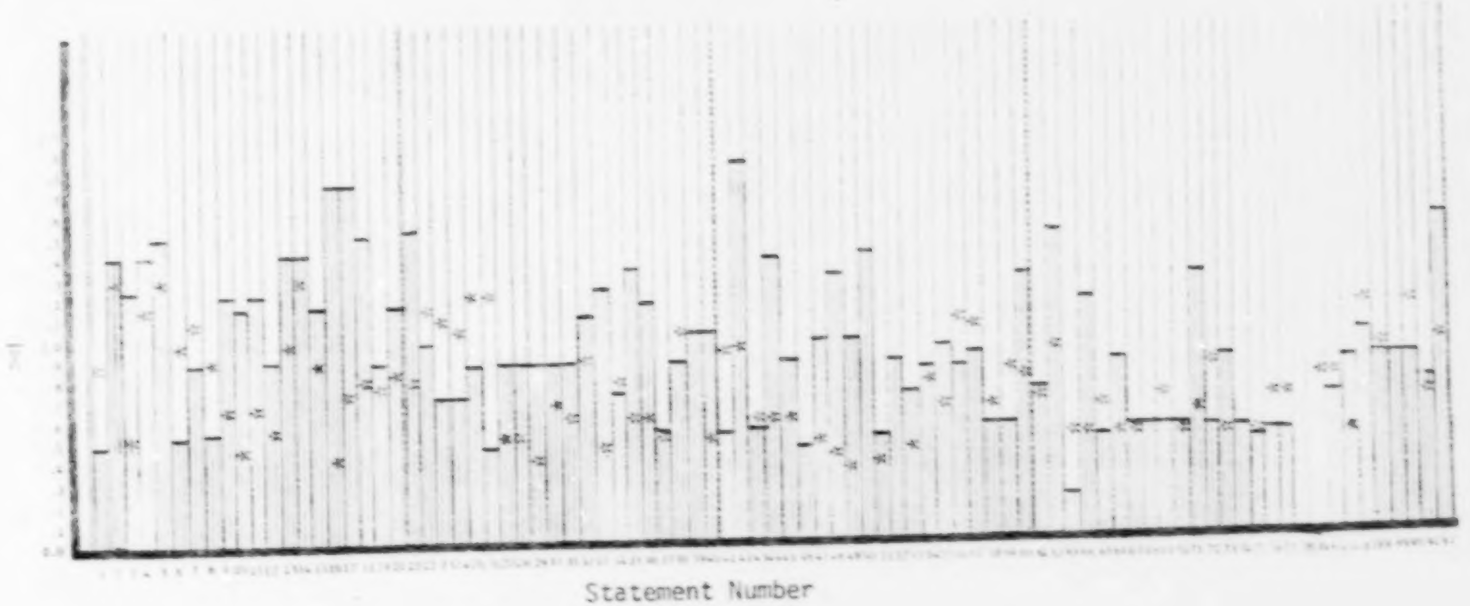


Chart F8.--Bar graph of standard deviations: Definitions, objectives, social and cultural environment, learning, and teacher education and EPA/OE--Overseas.

APPENDIX G

GROUP CONSENSUS: STATEMENTS 1-97--QUEBEC, CANADA, U.S.A., AND OVERSEAS

APPENDIX G

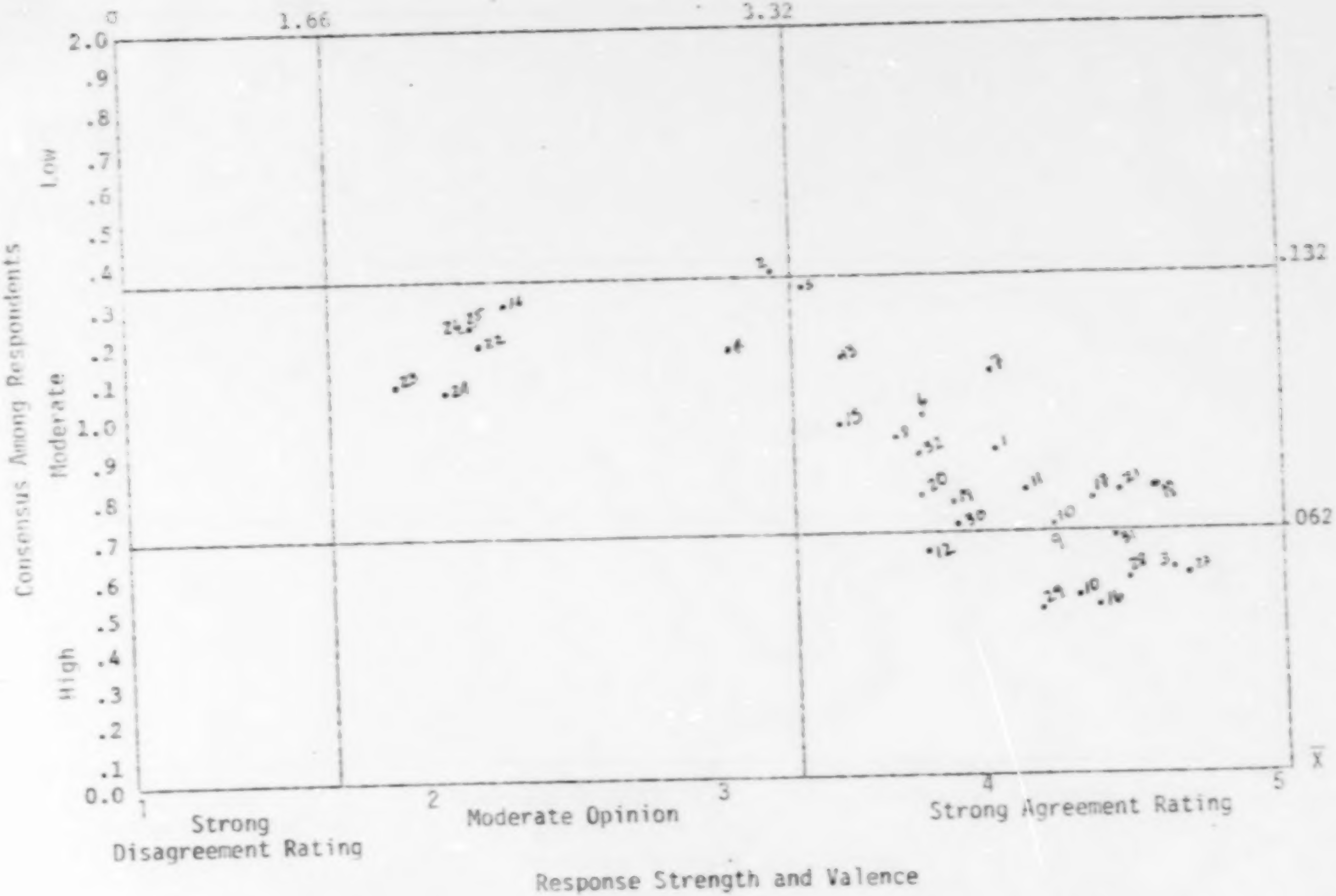


Chart G1A.--Group consensus in Quebec concerning definitions of EPA/OE (Part I).

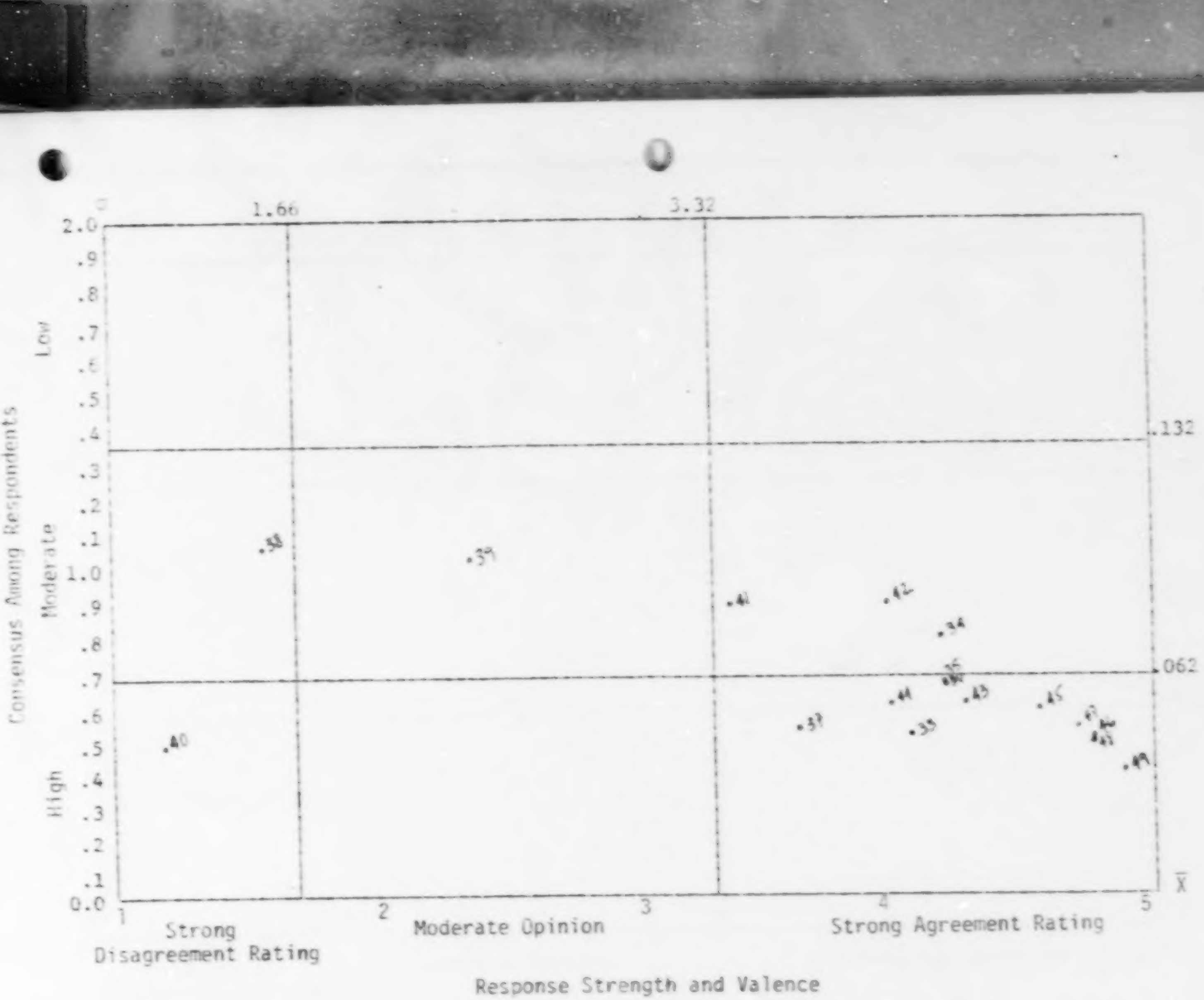


Chart G1B.--Group consensus in Quebec concerning objectives of EPA/OE (Part II).

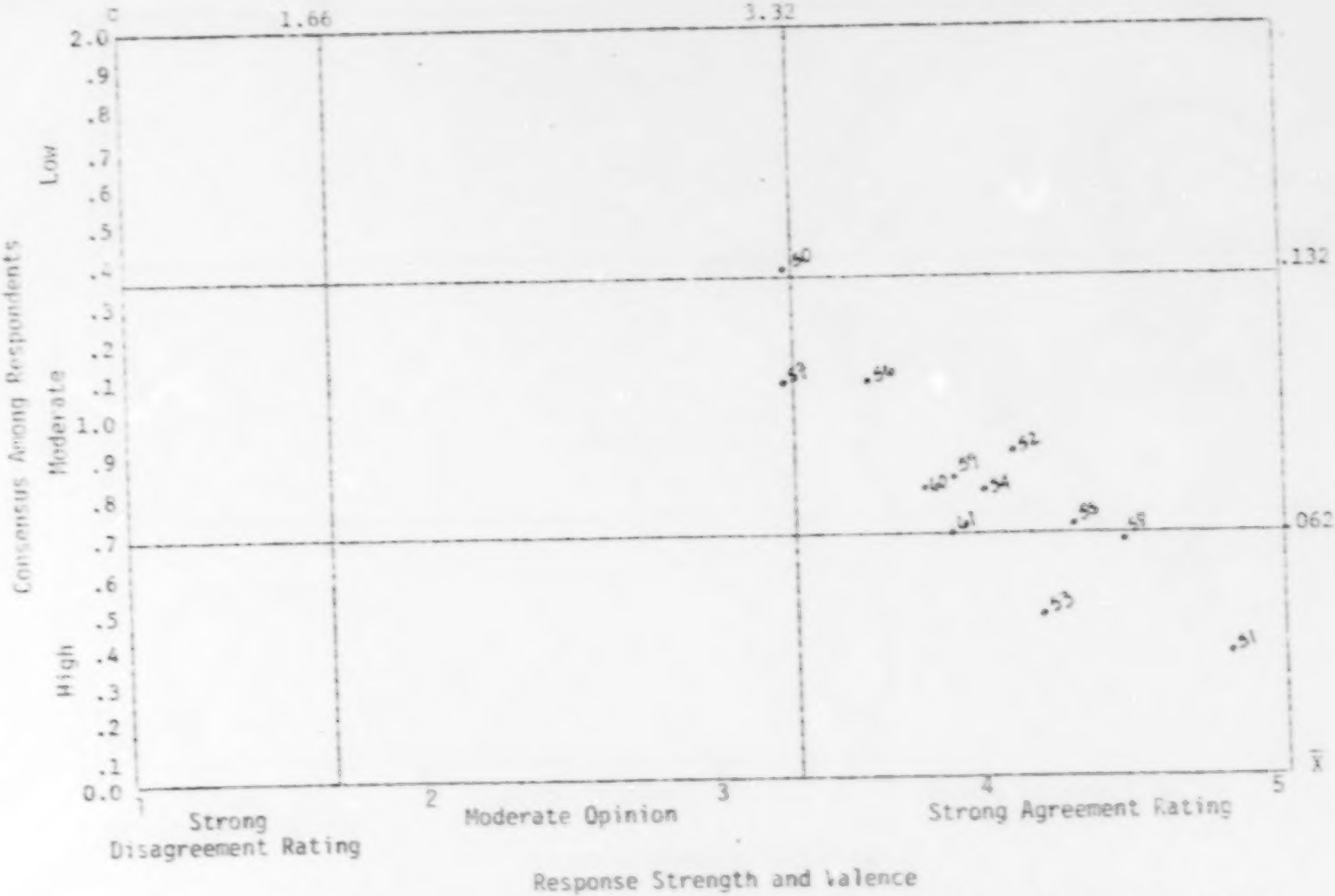


Chart GIC.--Group consensus in Quebec concerning social and cultural environment and EPA/OE (Part III).

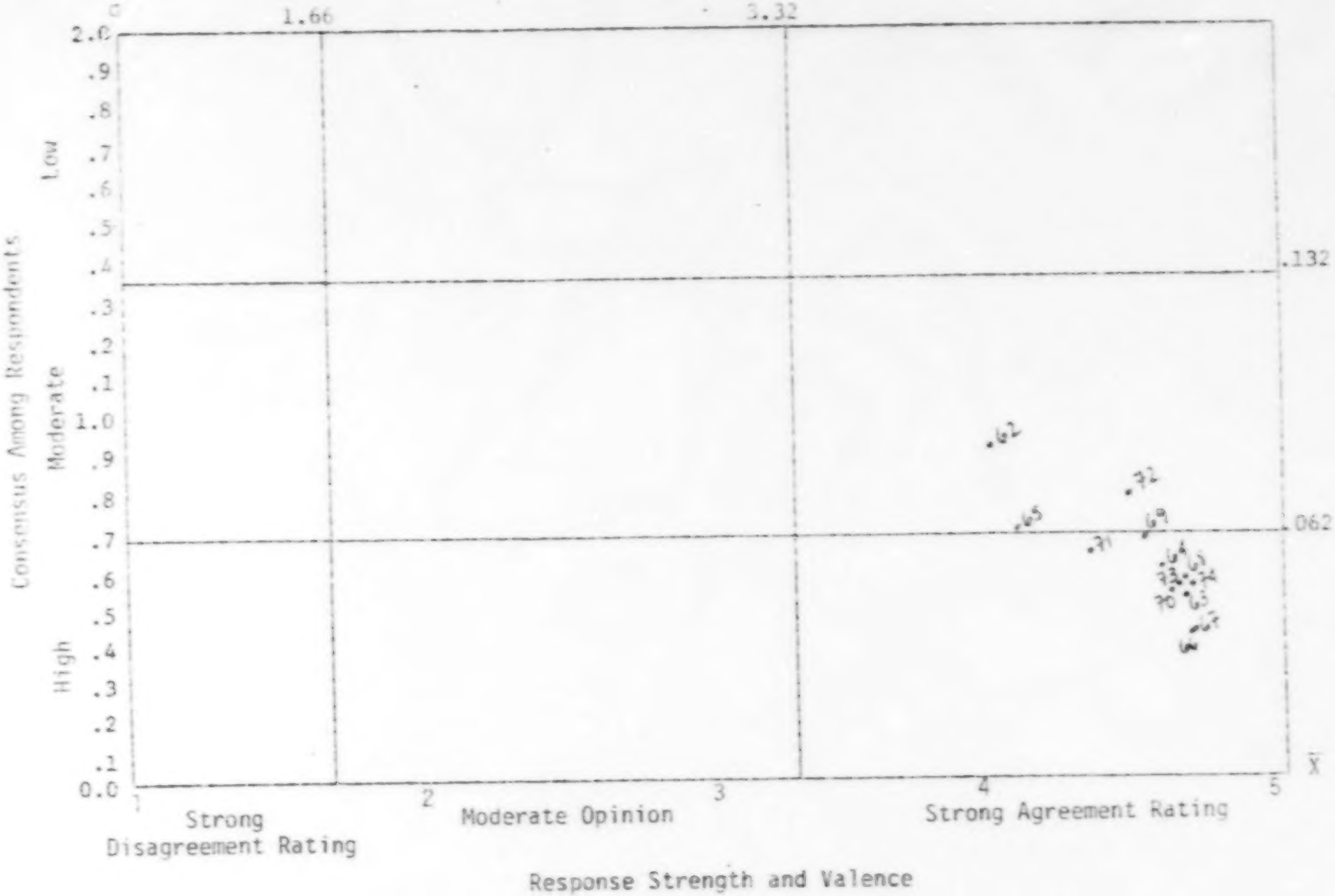


Chart GID.--Group consensus in Quebec concerning learning and EPA/OE (Part IV).

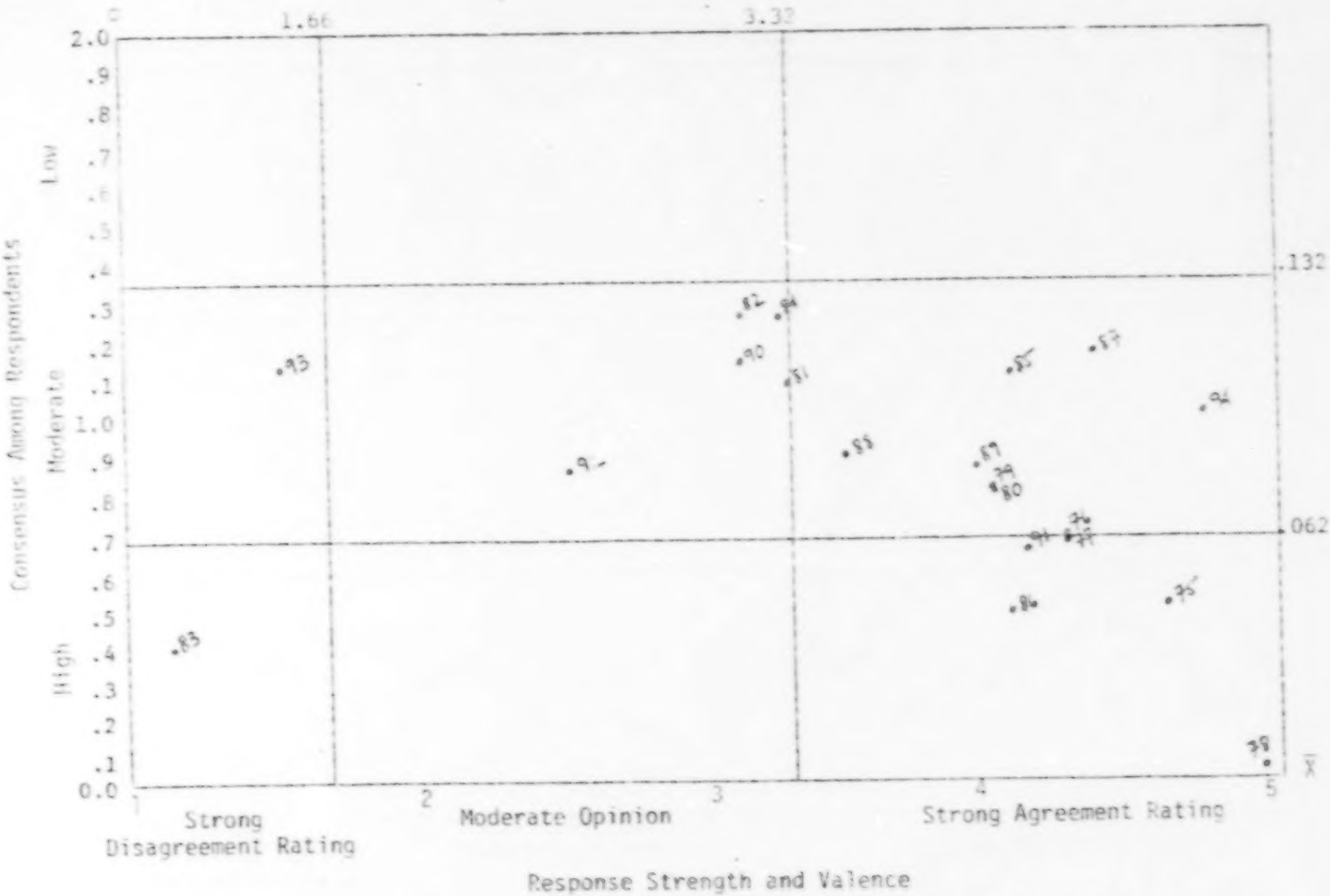


Chart GIE.--Group consensus in Quebec concerning teacher education and EPA/OE (Part V).

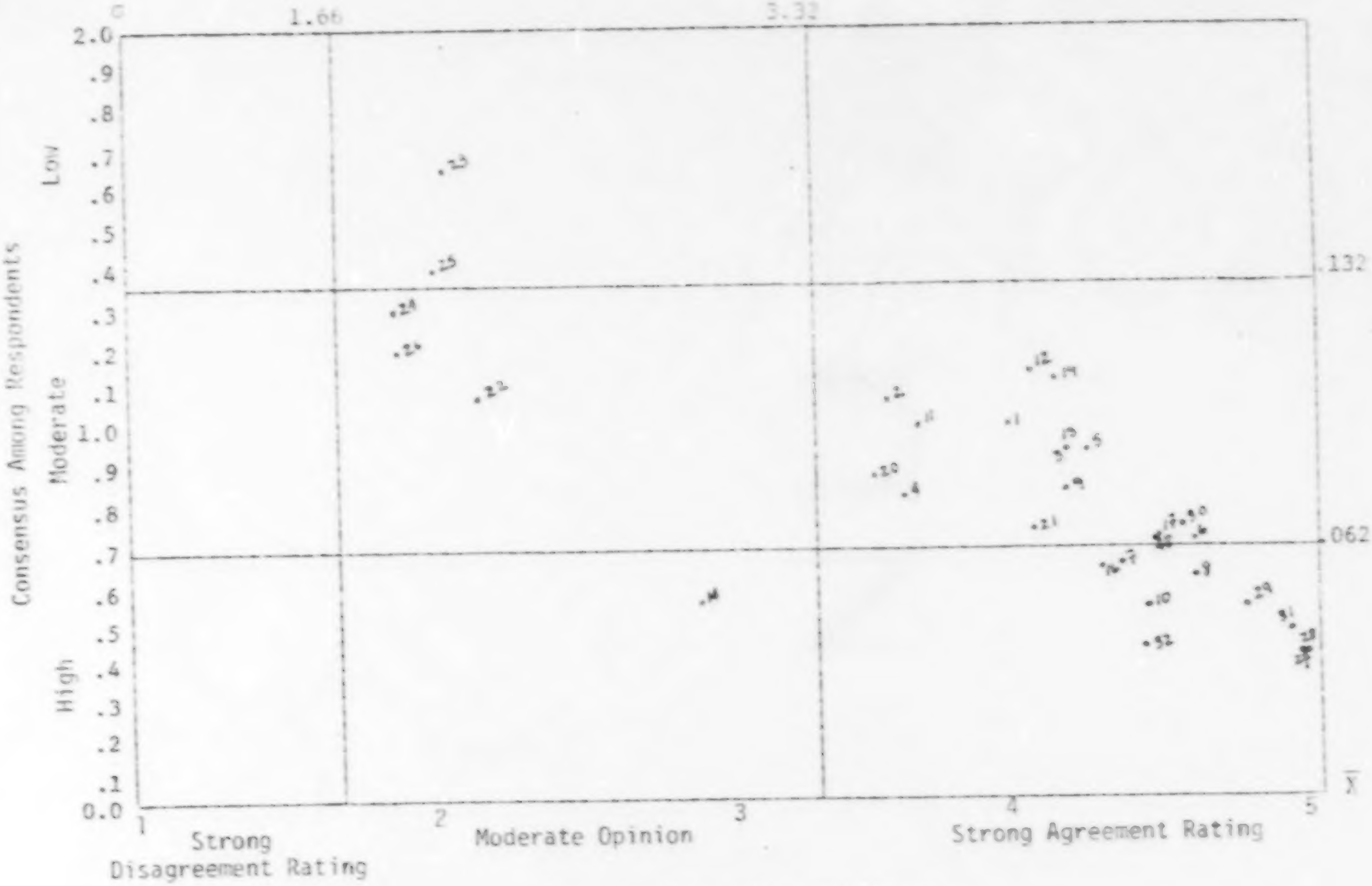


Chart G2A.--Group consensus in Canada concerning definitions of EPA/OE (Part I).

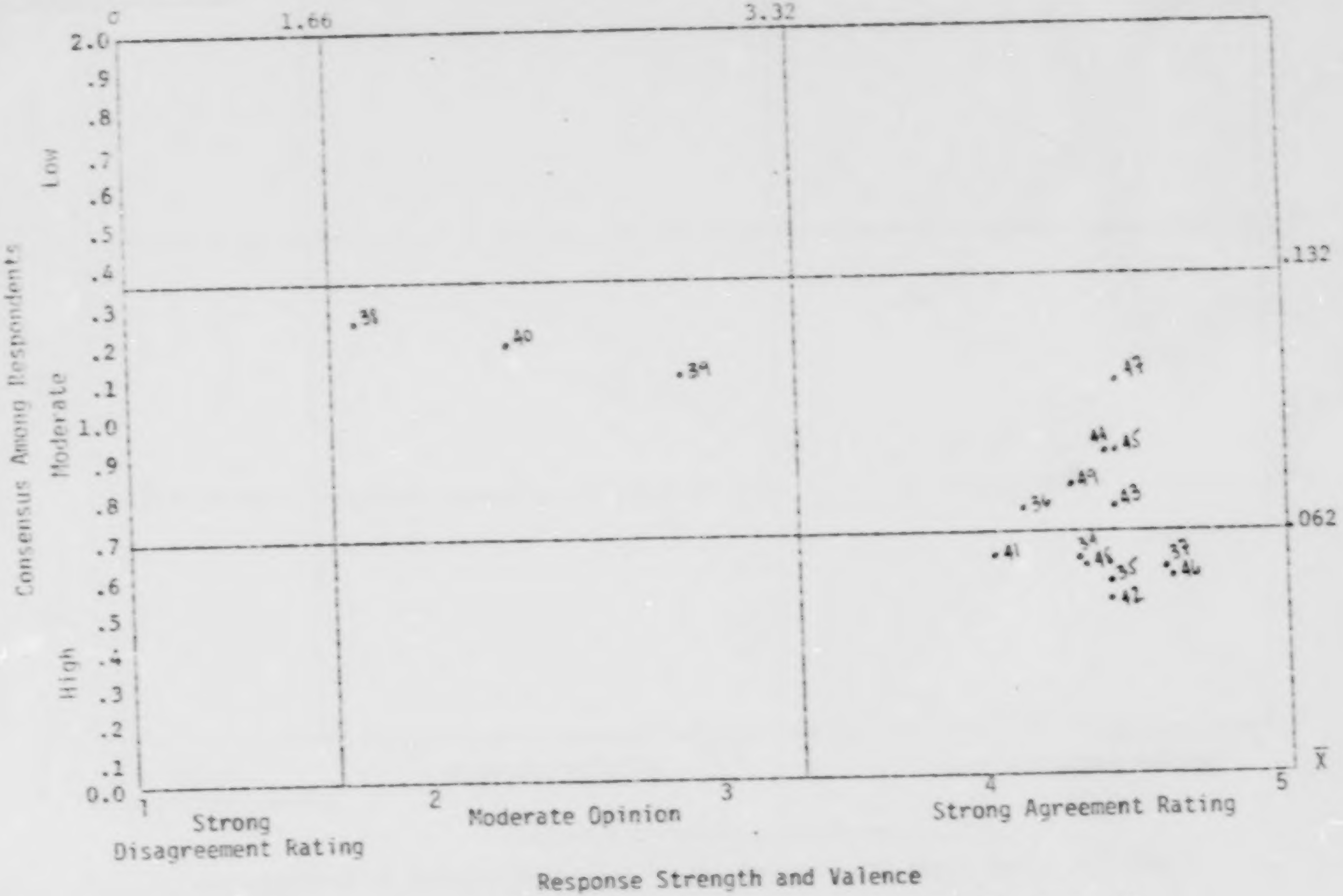


Chart G2B.--Group consensus in Canada concerning objectives of EPA/OE (Part II).

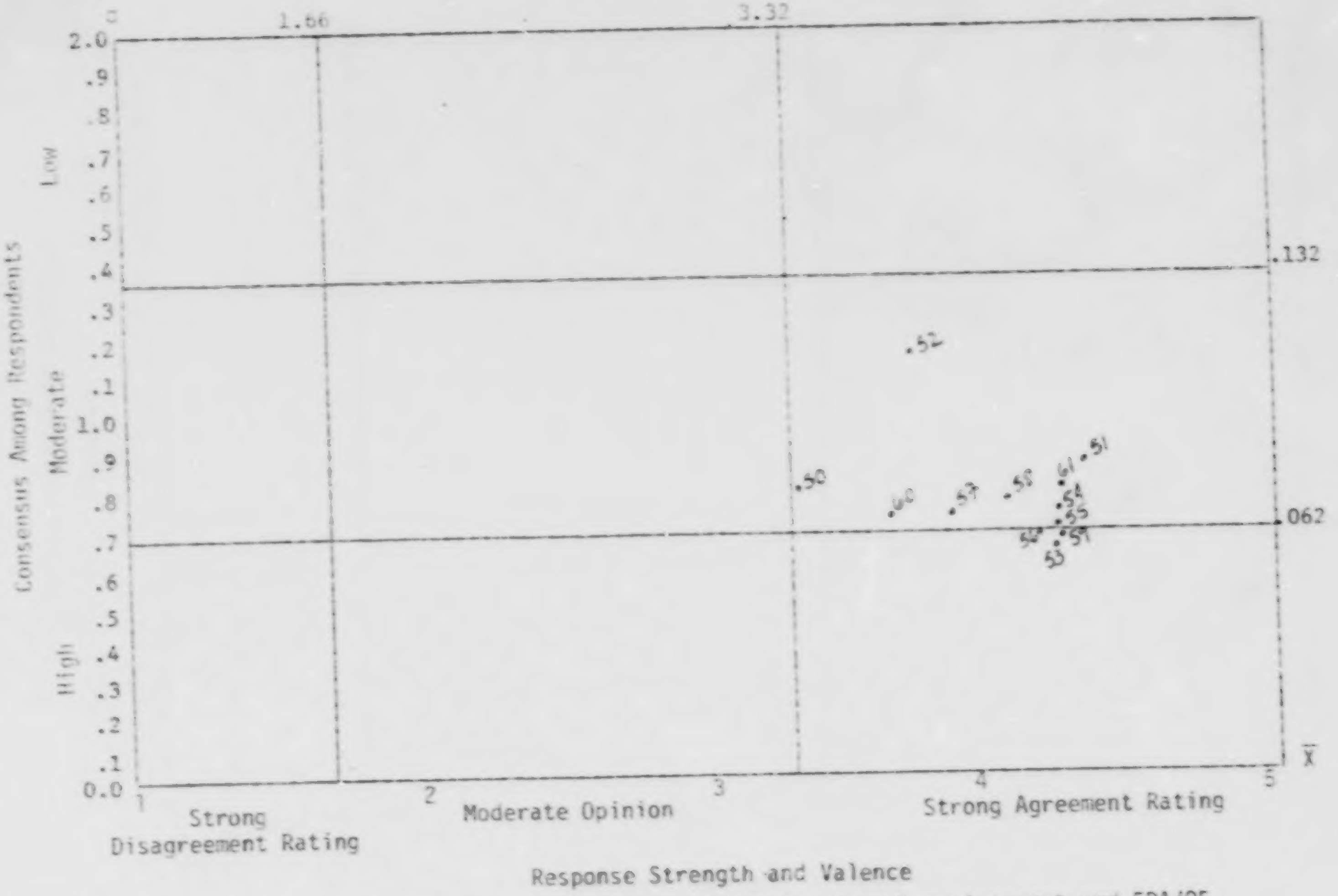
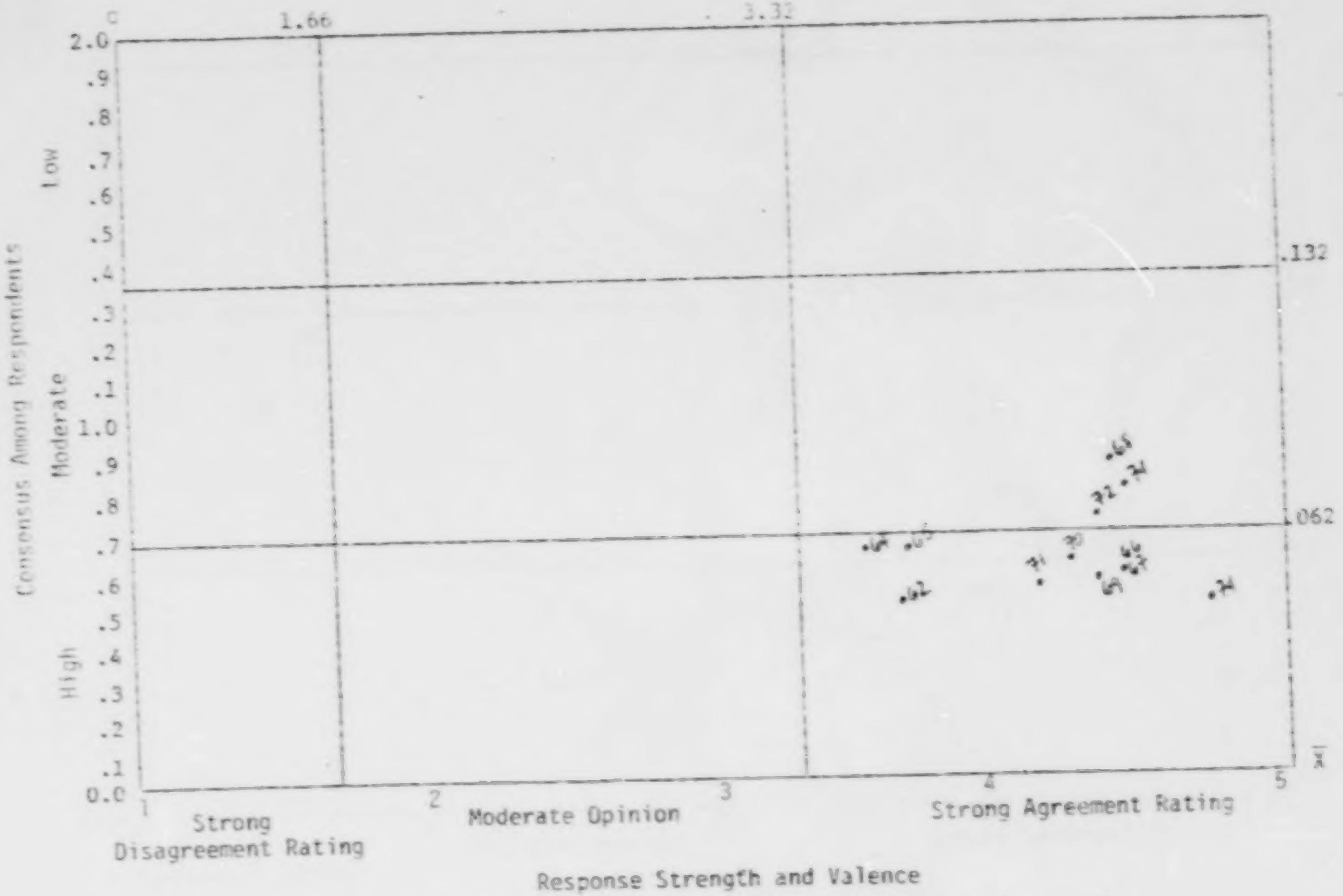


Chart G2C.--Group consensus in Canada concerning social and cultural environment and EPA/OE (Part III).



Cnart G2D.--Group consensus in Canada concerning learning and EPA/OE (Part IV).

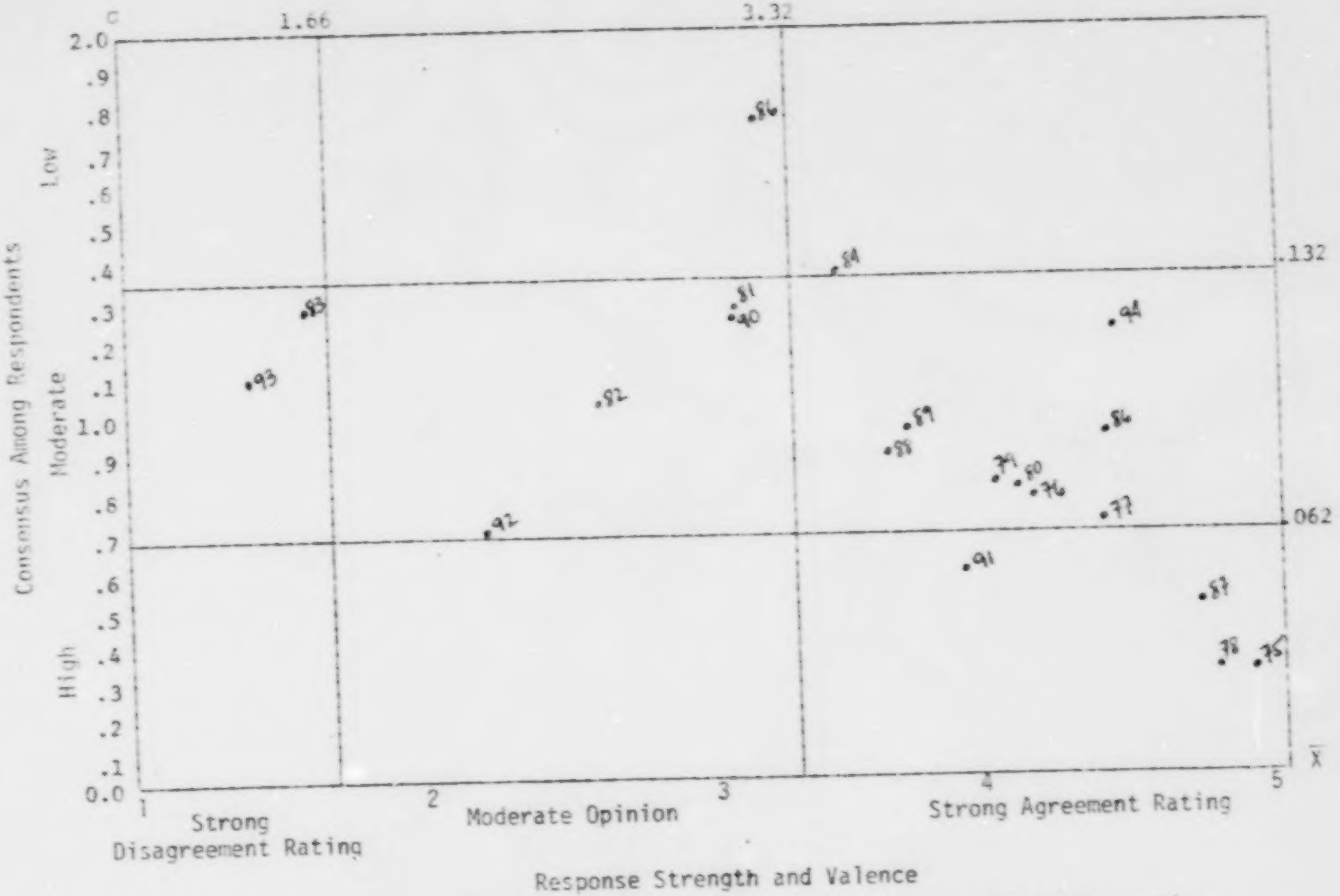


Chart G2E.--Group consensus in Canada concerning teacher education and EPA/OE (Part V).

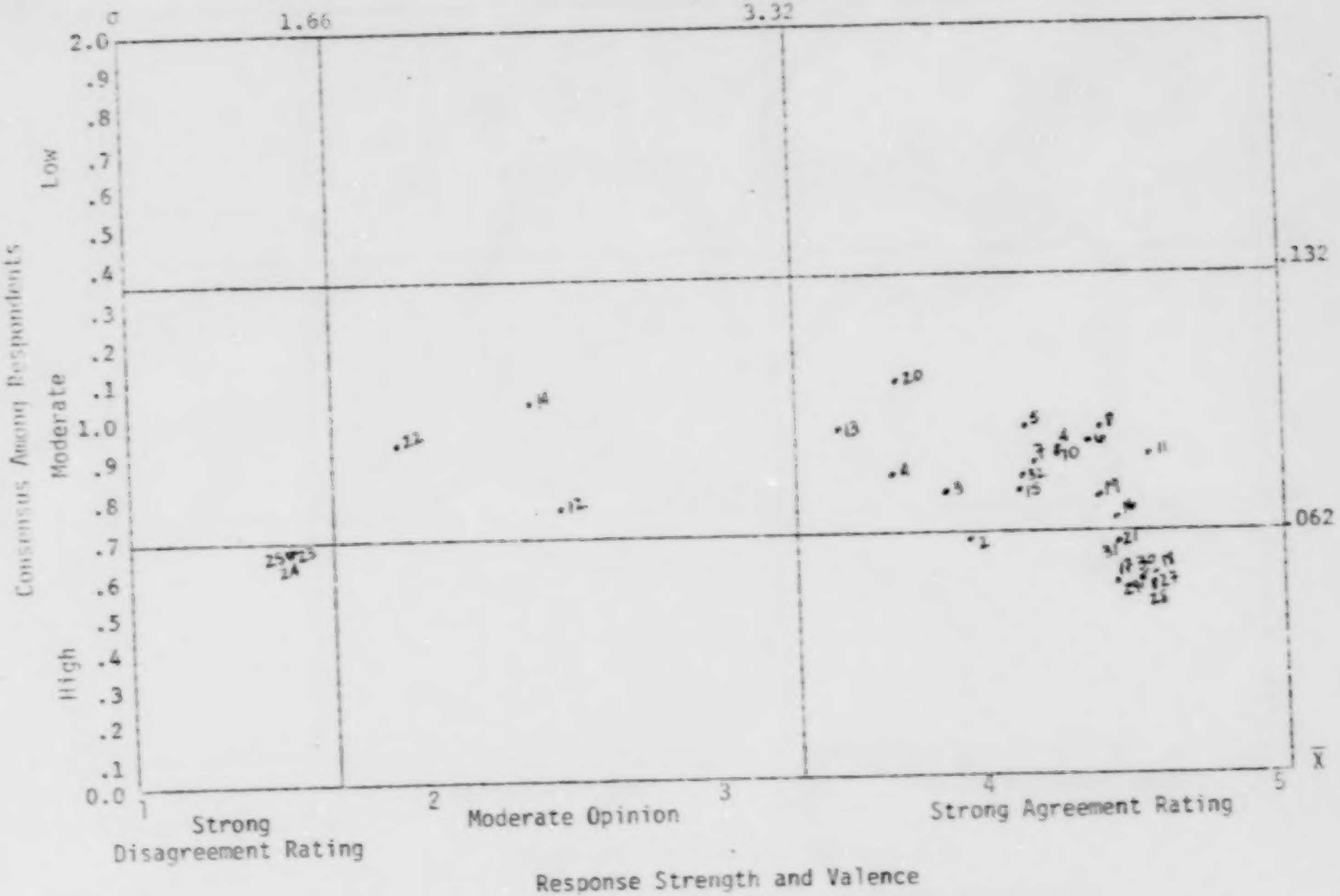


Chart G3A.--Group consensus in U.S.A. concerning definitions of EPA/OE (Part I).

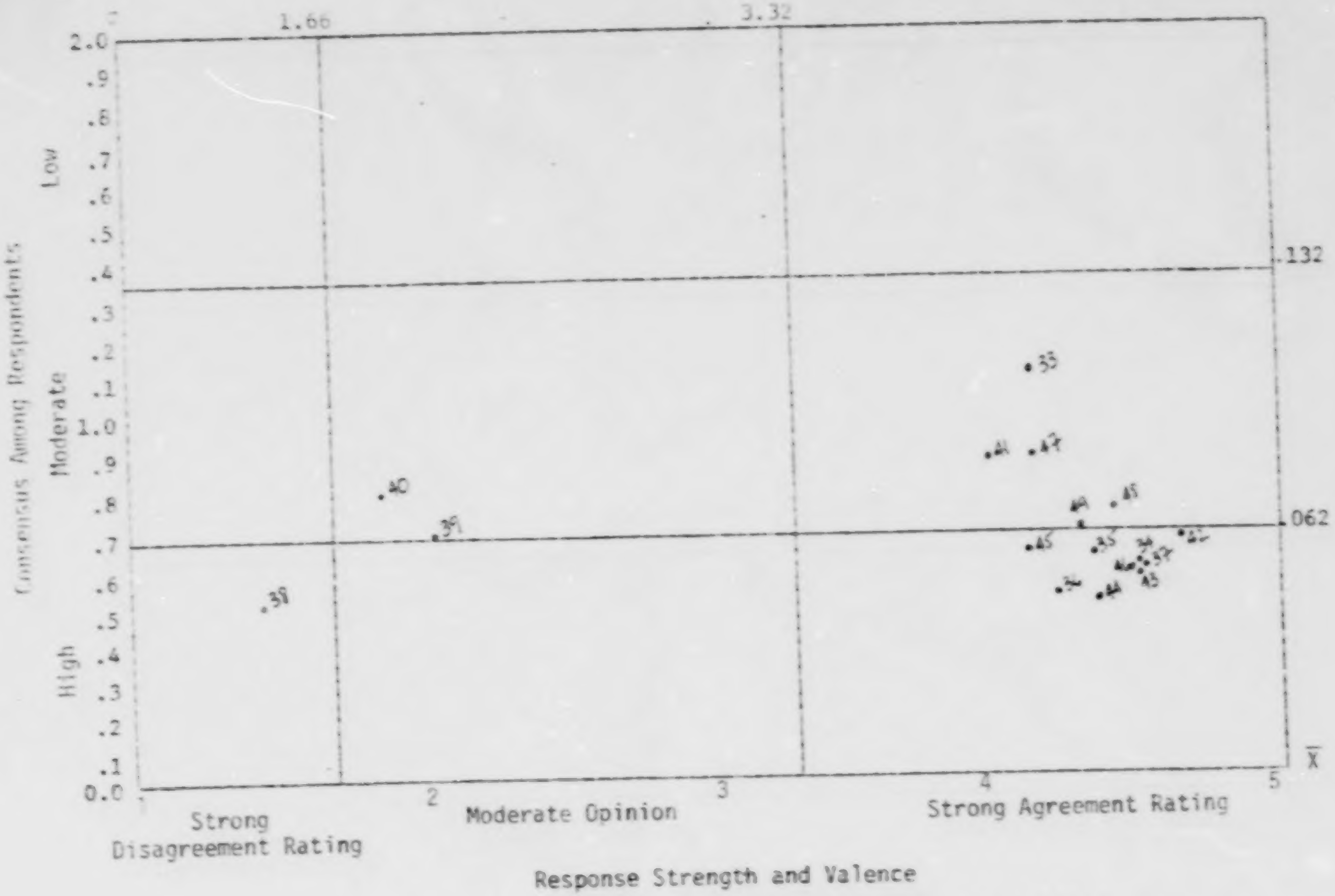


Chart G3B.--Group consensus in U.S.A. concerning objectives of EPA/OE (Part II).

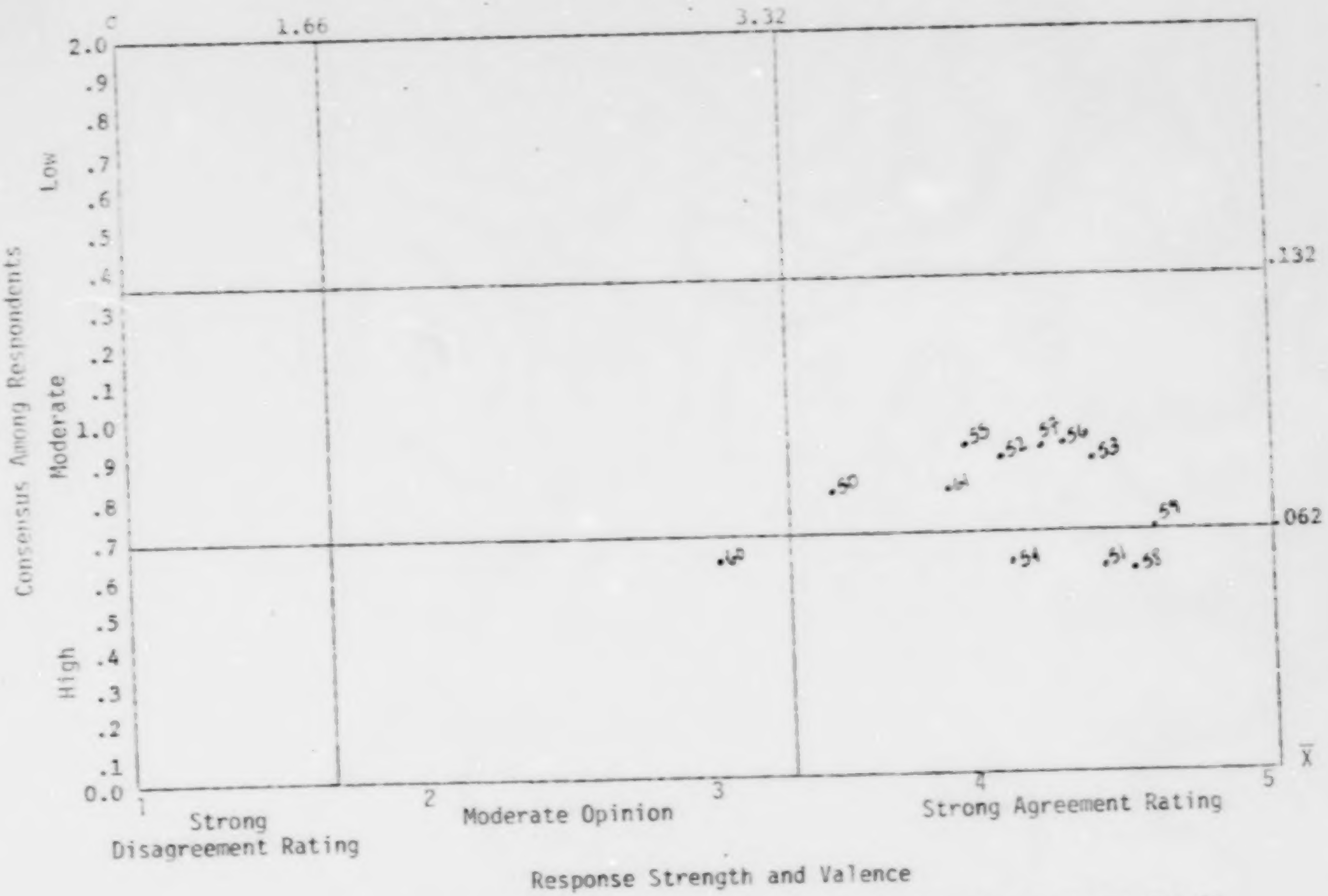


Chart G3C.--Group consensus in U.S.A. concerning social and cultural environment and EPA/OE (Part III).

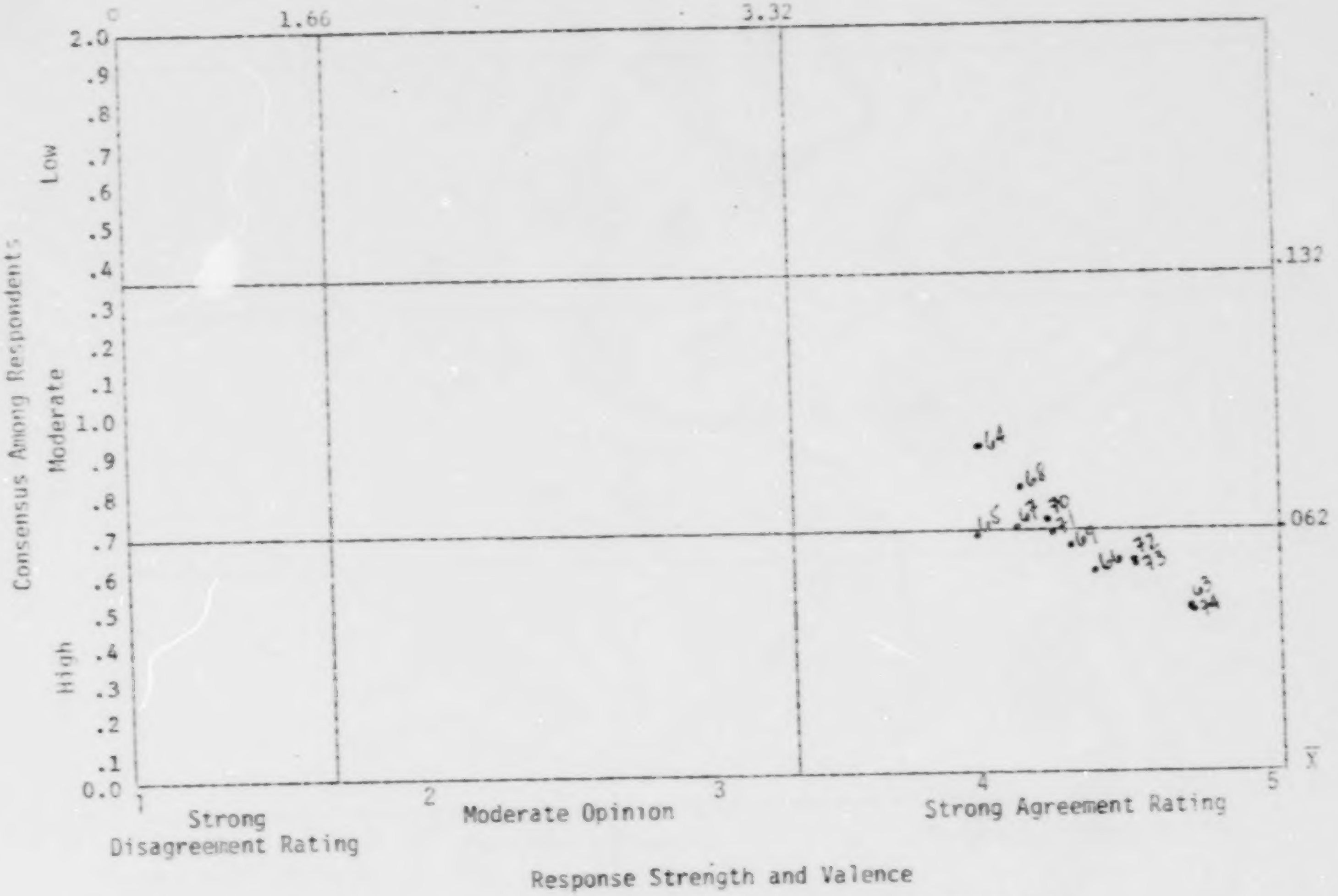


Chart G3D.--Group consensus in U.S.A. concerning learning and EPA/OE (Part IV).

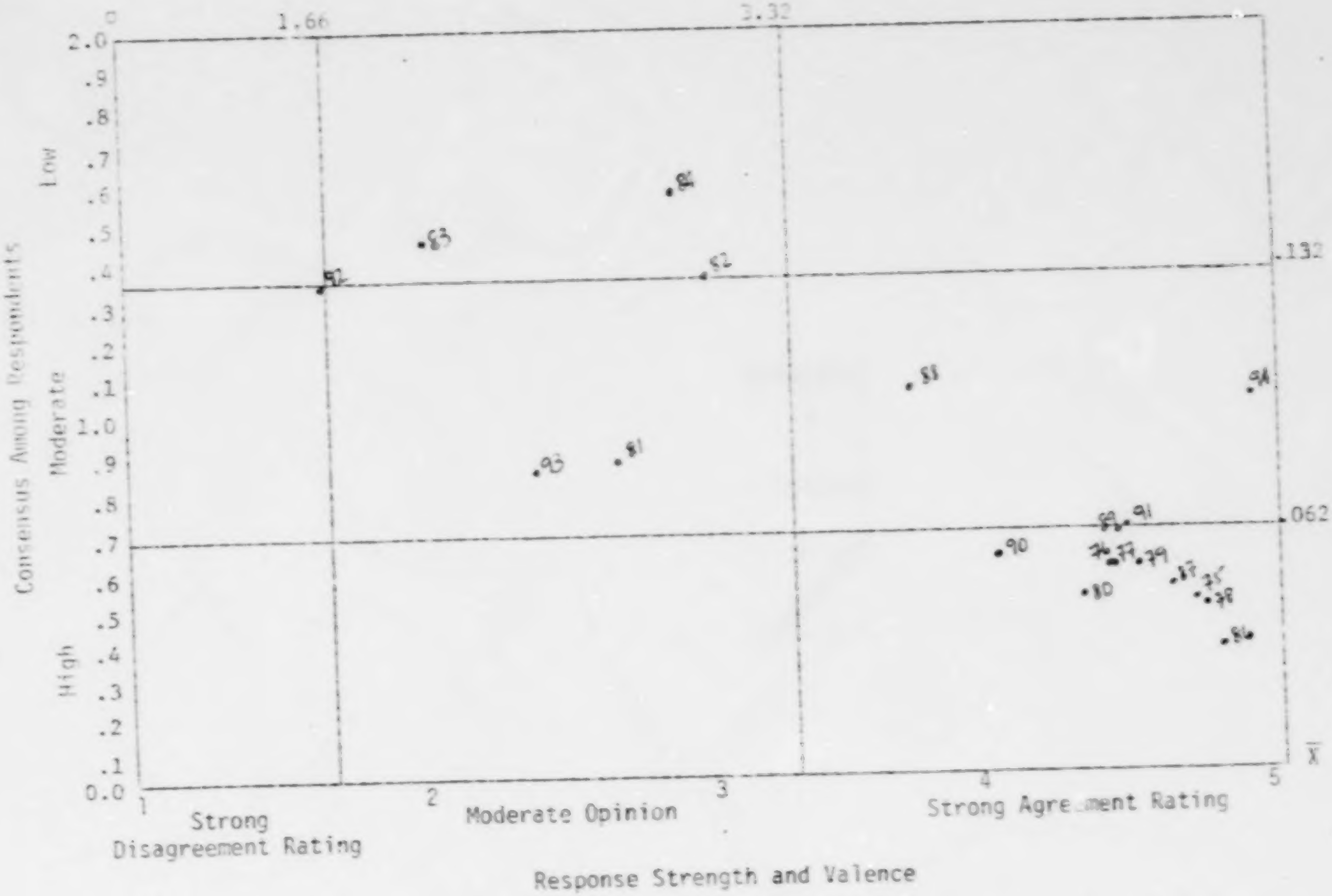


Chart G3E.--Group consensus in U.S.A. concerning teacher education and EPA/OE (Part V).

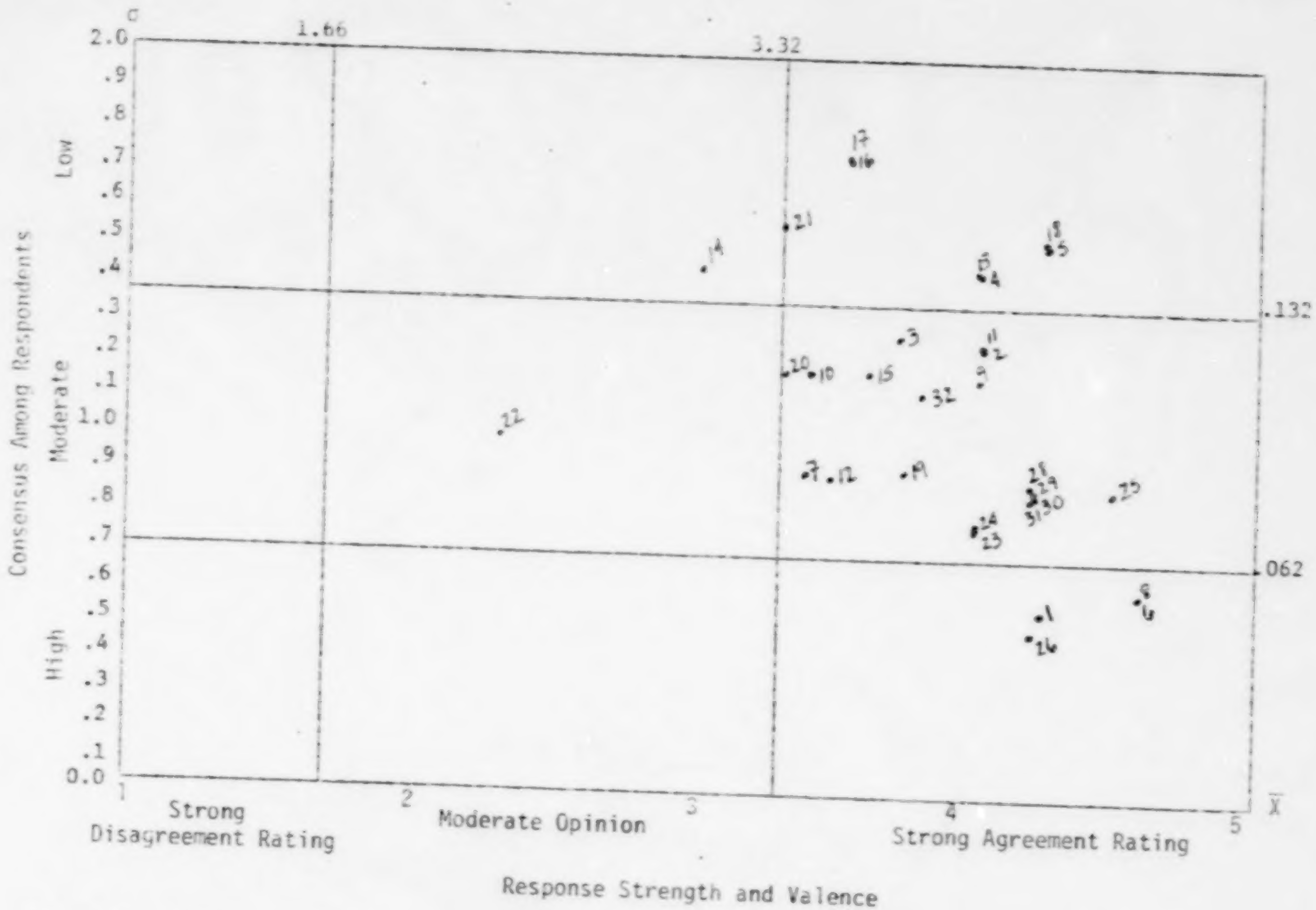


Chart G4A. Group consensus overseas concerning definitions of EPA/OE (Part I).

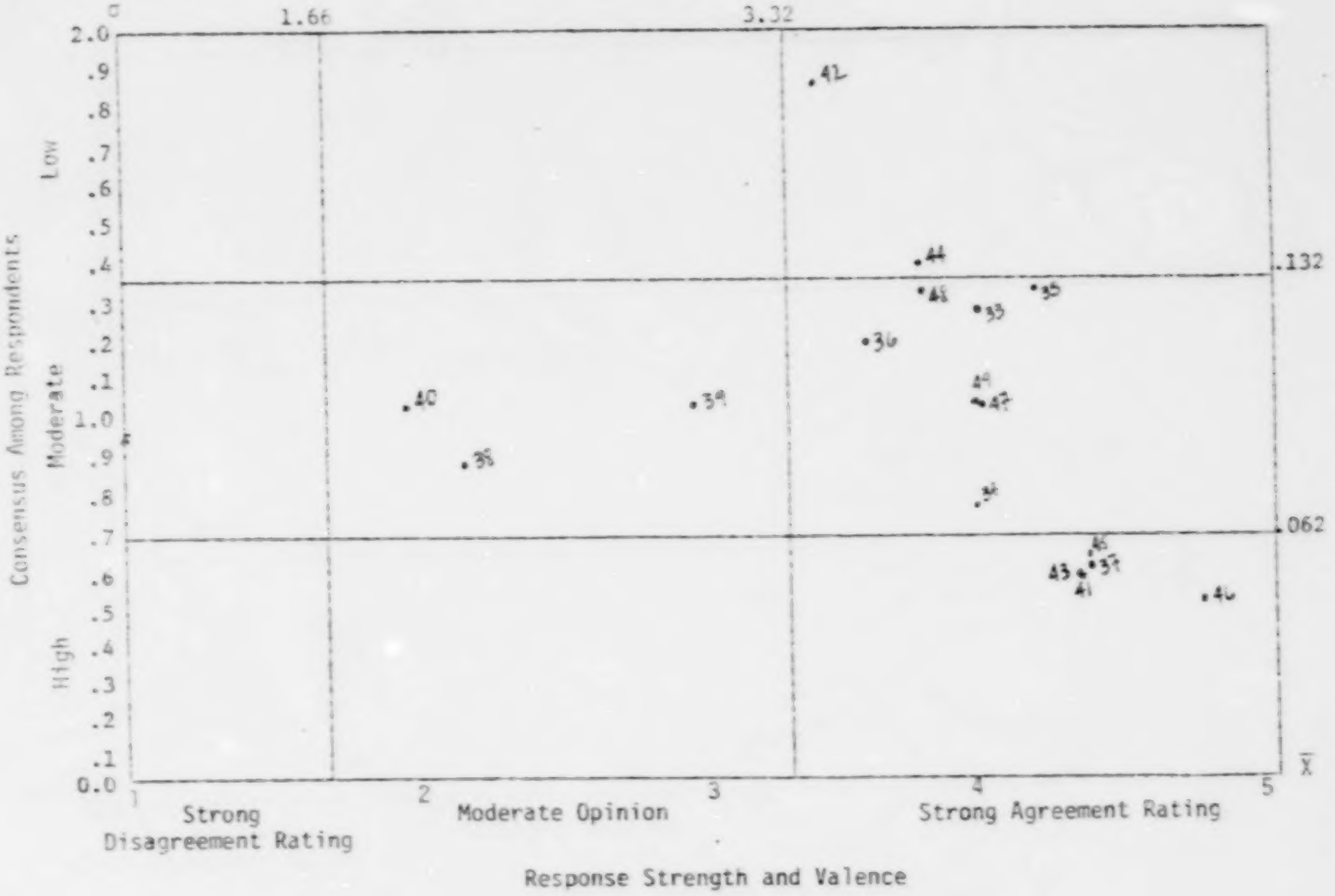
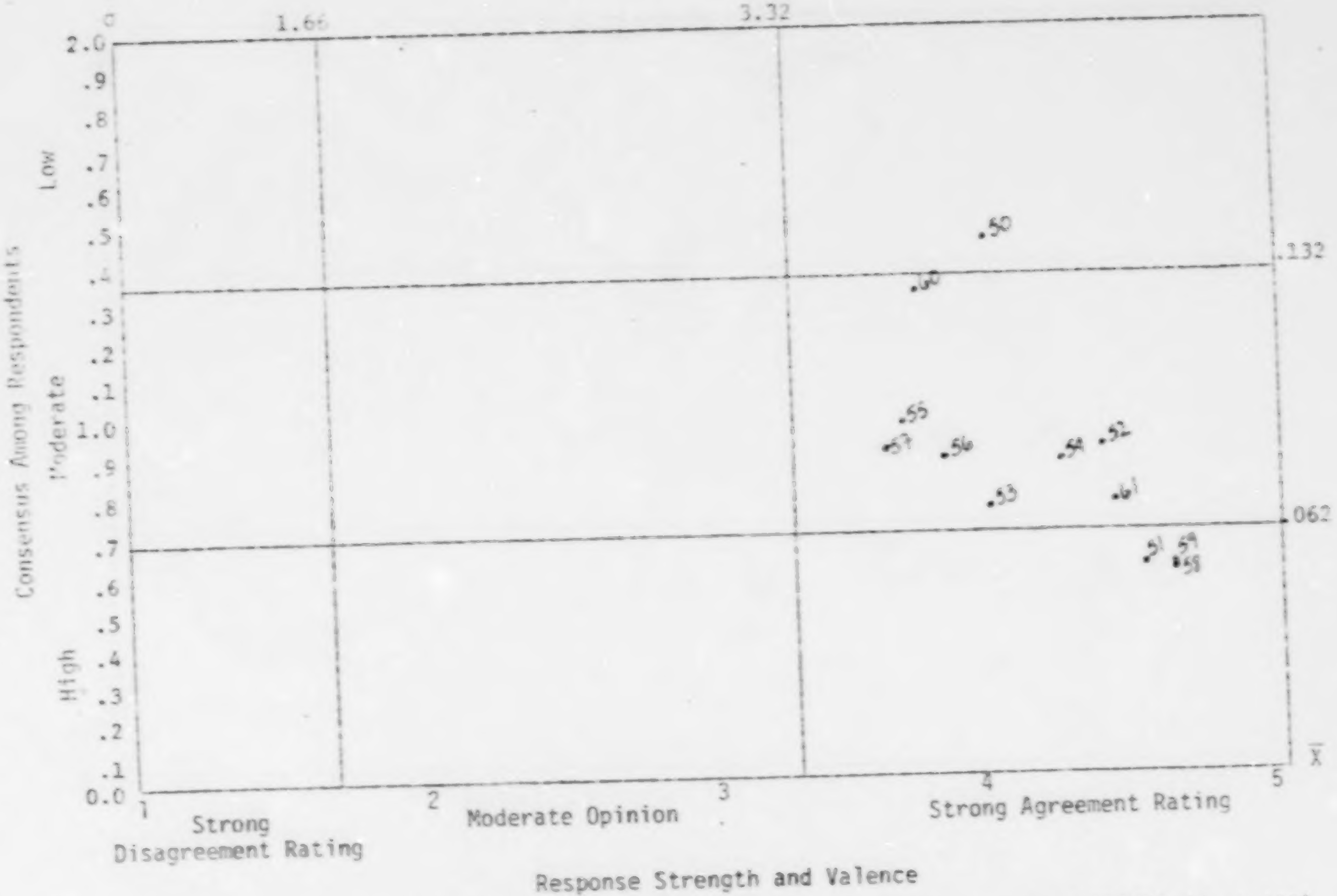


Chart G4B.--Group consensus overseas concerning objectives of EPA/OE (Part II).



Cnart G4C.--Group consensus overseas concerning social and cultural environment and EPA/OE (Part III).

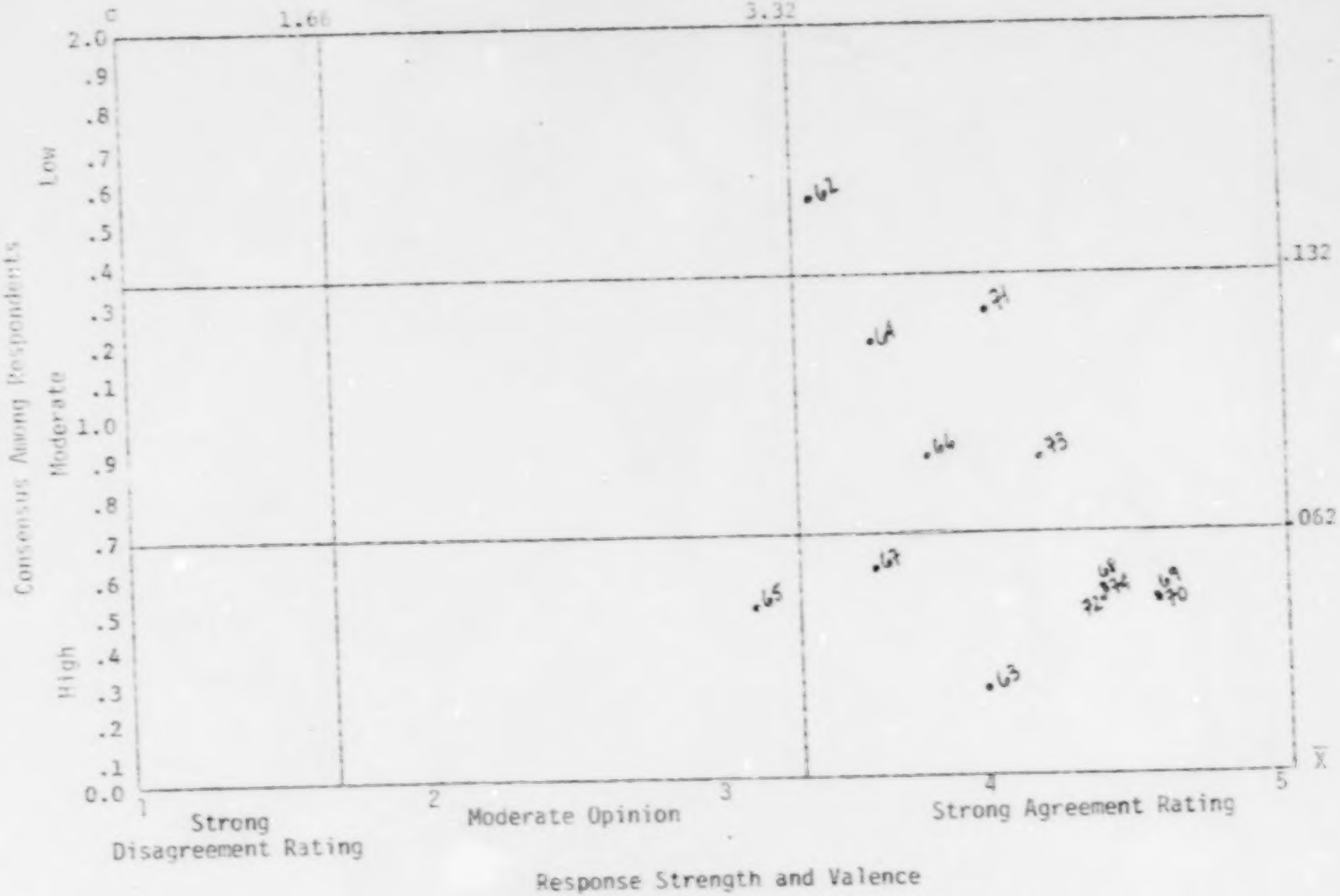


Chart G4D.--Group consensus overseas concerning learning and EPA/OE (Part IV).

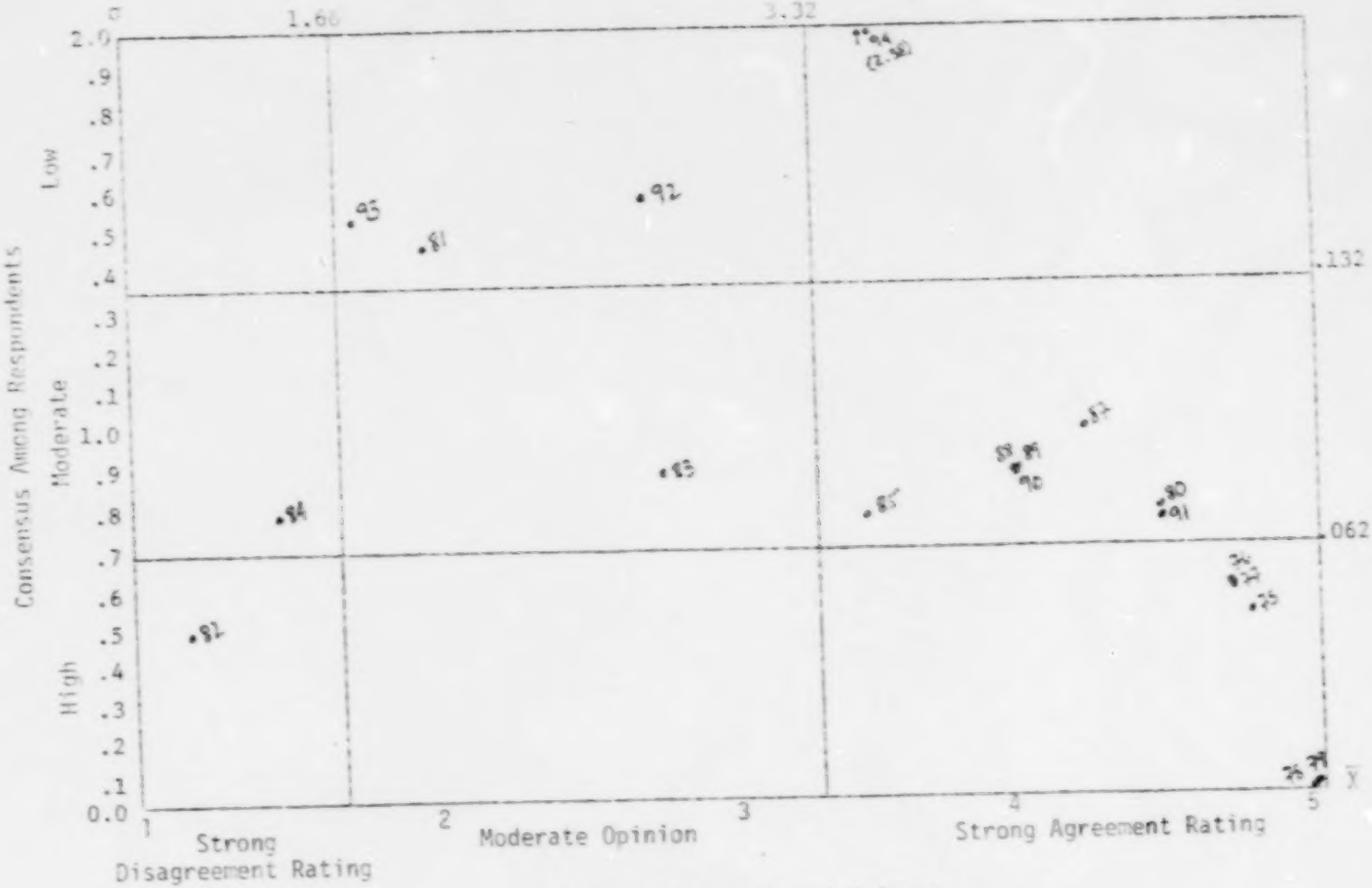


Chart G4E.--Group consensus overseas concerning teacher education and EPA/OE (Part V).

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